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ABSTRACT

The proceedings of Phase I of the Italian University Rectors' Exchange Project, which took place on the campuses of three American universities, are presented. The papers and discourses are categorized as to (1) those that have some bearing upon university governance, both in Italy and the United States, and (2) those that focus upon the academic program of the university. Selected statements of participants are included to supply an overview of the conference subject matter and to indicate the degree of commitment by leaders in Italian and American higher education in efforts to resolve the crisis in education. Part I of the proceedings concerns University Governance: Comparative Problems, and contains discussions of the following topics: Autonomy; University Planning and Development; Financing Higher Education; Decision-Making Bodies; Administrative Personnel; Recruitment and Training; University Structure and Function; and University Scientific Research. Part II relates to Academic Problems, with discussions of: Organization of Curricula in Humanistic Fields; Organization of Curricula in the Sciences; Professional Education; The Private University: An Overview; The University's External Relations; Faculty-Student Relations; and Miscellaneous. Three appendices present the program and rosters of the attendees. (DR)

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COMMON CONCERNS
IN HIGHER EDUCATION
AN ITALIAN-AMERICAN UNIVERSITIES PROJECT
Planned for the Permanent Conference
of Italian University Rectors

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Proceedings of an International Conference
held under the joint auspices
of

THE UNIVERSITY OF
COLUMBIA UNIVERSITY - MICHIGAN - RUTGERS UNIVERSITY

The Commission for Educational
and Cultural Exchange with Italy

The Committee on International U.S. Department of
Exchange of Persons State

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PREFACE

When, in the Fall of 1968, the former Executive Secretary of the (Fulbright) Committee on International Exchange of Persons, Mr. Francis Young, suggested in preliminary fashion an exchange of academic personnel between Italy and the United States, we at Rutgers University listened attentively. In cooperation with the Fulbright Committee and the Department of State, Rutgers had already hosted two conferences for senior foreign scholars, just before return to their homelands. Rutgers personnel had also participated in orientation conferences for Fulbrighters, at the beginning of their American stay.

Dr. Mason W. Gross, President, and Dr. Richard Schlatter, Vice President of Rutgers, enthusiastically supported the evolving project as entirely appropriate to the University's long-held interest in things Italian. Rutgers had developed, under the skilled direction of Professor Remigio U. Pane, one of the largest and most active graduate programs in Italian in America. Even as the exchange program was being projected, Rutgers College was planning a Junior Year in Florence (which will, in fact, be launched in the Fall, 1971). Meanwhile, Dean Werner Boehm of the Graduate School of Social Work--in cooperation with the Fulbright Committee and Brandeis' Florence Bertolotti School--had already been involved in a bilateral exchange with Italian universities and social welfare institutes. In fact, as it turned out, the Italian rectors and the Italian social welfare experts overlapped in their stays in the metropolitan New York area: both groups were entertained by the Italian Consul-General, New York, in the Spring, 1970.

The Italian-American Universities Project would not have been authentic, of course, without some interruption. After careful planning in a Steering Committee, representing the three American universities--Rutgers, Columbia, Michigan--and including the Fulbright Committee and the Department of State, in the Spring of 1969 the whole project had to be shelved. Dialogues, panels, even Italian university reform had to be postponed because of academic disruptions in Italy!

With the support of Dr. John Landgraf (who succeeded Francis Young as Executive Secretary); his deputy, Dr. Elizabeth Lam, of the Fulbright Committee; and Miss Maria Stevens, of the Department of State, as Director of International Programs I visited Rome in June, 1969. There I enjoyed the hospitality of, and participated in detailed planning with, the Commission for Educational and Cultural Exchange with Italy. Involved in the discussions were Miss Cipriana Scelba, the Commission; Mr. Russell Harris, of the U.S. Embassy; Professor Mario Rolla, Rector of the University of Pavia and Secretary-General, Standing Conference of Rectors; and Dr. Sofia Maria-Corradi, Secretary of the Standing Conference. Fortunately, Dr. Richard Gardner of Columbia University was also in Rome at the time, and lent his wise counsel.

By the Fall of 1969, planning for the exchange began again seriously. During the Winter, Professor Alessandro Faedo, Rector of the University of Pisa and President of the Standing Conference, was in New York on other business and with his guidance, the actual program began to take shape.

In the exchange, which began in March, 1970, Rutgers was immeasurably aided by a Steering Committee which consisted of the following:

Rutgers: Henry C. Herge, Program Associate (and
Rapporteur for all sessions);
Benigno B. Pane, Chairman, Department of Romance
Languages;
James R. Watson, Vice President for Public Affairs
Edward B. Wilkens, Professor of Planning.

Columbia: Ivar E. Berg, Jr., Associate Dean of Faculties;
Howard R. Marraro, Professor Emeritus of Italian.

Michigan: Raymond Grew, Professor of History and Director,
Center for Western European Studies;
J. Downs Herold, Associate Supervisor of Conferences;
Joyce M. Schrock, Conference Coordinator.

Without their help, and that of many colleagues (listed in the Appendix), the project could not have been a success. I am particularly grateful to three busy and distinguished Presidents--Dr. Mason W. Gross, Rutgers; Dr. Robben W. Fleming, Michigan; and Dr. Andrew Cordier, Columbia--who personally greeted and talked with the Rectors.

Looking back with perspective, I can now recall with good humor some of the difficulties. Rectors and their wives patiently travelled throughout the United States at the height of a major air lines strike. Miraculously, they were almost always on schedule. The guests arrived at Ann Arbor during the celebrated Black Action Movement (BAM) strike. Professor Grew and his colleagues carried on the program as though everything were normal. Columbia met its obligations amidst a major reorganization of the University. Certainly our academic crises lent authenticity to the exchanges!

All members of the American team, who engaged in the return visit to Italy in the summer of 1970--Professors Herge, Pane, and Wilkens (Rutgers); President Frederick Patton (Hieme (Colorado); Professor Raymond Grew (Michigan); and Professor Donald Blackmer (M.I.T.)--will long remember the warm hospitality of their Italian hosts.

Papers and condensations included in this report unfortunately are by no means complete. Verbatim transcriptions of exchanges at Michigan, for example, were not made nor was a day-to-day record kept of the visit in Italy. It is hoped, however, that the presentations included will prove to be representative and enlightening to those interested in problems of academic organization, planning, and reform.

Finally, I wish to thank personally my friend and colleague, Dr. Henry C. Herge, Professor of Comparative Education and Program Associate in our International Center. Conscientiously and beyond the call of duty, he has compiled and edited these proceedings. He and I both in turn wish to thank Dr. Paul Regan, Director, International Services and Research Staff, Institute of International Studies, U.S. Office of Education for his making it possible to reduce these bulky proceedings to microfilm.

New Brunswick
June 21, 1971

Ardath W. Burks
Director of International Programs

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INTRODUCTION

This publication is a report on Phase I of the Italian University Rectors' Exchange Project that took place on the campuses of three American universities (Rutgers, Michigan and Columbia) in the Spring of 1970. The exchange project was first conceived in 1969 as the vehicle whereby a large number of scholars and administrators in Italian and American higher education might be convened in a series of dialogues and informal discussions on administrative and academic issues of mutual interest.

During the early planning stage of the project, it was decided that, because of the language barrier, selected Rectors would need to prepare their papers in advance on assigned topics for distribution in English to all American participants, and that instantaneous interpretation would need to be furnished in all sessions to facilitate communication.

Topics of mutual interest were drafted, refined, and agreed upon during the final planning stage and each university arranged its own program featuring discussants in keeping with the host institution's recognized strengths and interests in the topics selected. Dialogues pertaining to various aspects of university governance and administration, for example, were scheduled at each of the three campuses, but other more distinctive features at each campus were included to provide for program variation.

The relaxed informality at each scheduled dialogue was intended to enable the visiting Rectors an opportunity to grasp quickly the distinguishing characteristics of American higher education and thus to compare our unique system with their own through question and answer procedures.

Unfortunately, space does not permit producing verbatim the extended dialogues that took place during each session, nor to record the array of trips and guided tours made to modern installations and facilities at each campus. Accordingly, a decision was made to condense all papers and discourse into two parts: 1) that which had some bearing upon university governance here and in Italy, and 2) that which had a focus upon the main function of the university--the academic program. As a result, selected statements of Participants were included to supply the reader with an overview of the subject matter of the conference and to give him an index of the degree of commitment made by the recognized leaders in Italian and American higher education in their individual and collective efforts to resolve the crisis in education.

The Italian Rectors were at Rutgers just a few days when they sensed that the American University is an anomaly--quite unlike their own. During the open discussion periods that followed, they probed American participants to learn more about the pressures for change, specifically in such areas as university autonomy, government interference, sources of support, open enrollment programs, structural changes

in organization and control of the university, and the amount of student and faculty voice in the decision-making process. In several instances their probing continued until frank and forthright responses were obtained. On other occasions, the heat of dialogue rose to an emotional pitch because there was disagreement among themselves on some crucial issue; but, in a most fundamental sense, such verbal exchange proved to be an educational process that resulted in better understanding of the values and attributes of our democratic system of education.

The American educators present at the many scheduled dialogues changed daily. For them, it was a learning experience to hear, for example, Rector Faedo, who holds the chair once held by the renowned Italian mathematician-astronomer, Galileo, candidly expound his views on social and educational change. On several occasions it became evident to American participants that the vast apparatus that exists behind the ancient university facades at Pisa or at Bologna is anything but quiescent. Rather, the movements that have generated reform are heaving and in a constant state of agitation, that despite centuries of custom and tradition Italian universities are attuning themselves for value change and a new function, yet retain that which has given them academic prestige.

In the same vein while many words in praise of superiority of the Italian system of university education were heard, Rector Faedo and his colleagues were quick to admit its shortcomings and to cast doubt on the system's ability to meet the pressing demands forced upon it by a technological age. In actuality, open enrollment already exists in Italian universities. Thus, the problems currently being encountered in American institutions are not new in Italy, but perhaps more acute in that their university system was formulated during the 10th to the 19th Centuries when programs and ideas on education were geared for the intellectually elite and a retention of the social order. Immediately after World War II, Italy began its tedious reform efforts in order to adjust its universities to the needs of an expanding student population and fresh relevance. Thus, the reader may find this topic of discussion of interest mainly because it reflects modern concepts of comparative education.

One other topic that warrants comment here because of the changing patterns of authority in American higher education has to do with the legitimate desire of students as well as faculty to have a major role in defining the purposes, the programs, and the constituency of our universities. For the Italian university, however, this topic continues to be one of its unsolved problems. Since the student strike of 1969, there appears to be a residual effect from the traditional hierarchical system. Italian universities have been plagued by an era of conflict and turmoil, but the tension that persists between autonomy and democratic involvement may be lightened unless ways are found to resolve the seething discord by giving formal voting status to faculty members and students.

Finally, the matter of educational exchange of faculty and students was one that permeated nearly every informal, non-scheduled gathering of American and Italian educators. Everyone seemed to be in accord that benefits would accrue if such a program could be made operative on a large scale. The Italian Rectors reflected their enthusiasm and high expectations, but perhaps their hopes in this regard were unrealistic. The current administration in Washington has not considered the international exchange of scholars and students a high priority item; so, the hopes and ambitions that were generated so spontaneously by this conference must, unfortunately, be postponed for a more fortuitous period.

HENRY C. HERGE
Editor

1.
MASON W. GROSS

Opening Session Address

THE AMERICAN UNIVERSITY*

Gentlemen, I have not been told how much you already know about American universities; but I thought perhaps as a general introduction, before you begin the planned seminars and enter into dialogues on problems of mutual interest, I might outline some of the different types of colleges and universities that you will visit.

You are scheduled, for example, to visit Columbia, which is one of our greatest private universities. As a private institution, it is controlled by a Board of Trustees, which is made up entirely of private citizens. Furthermore, the Board elects its own members and is, therefore, self-perpetuating. It controls its own finances; it pays its own way.

You are also scheduled to visit the University of Michigan, which, like us, is a state university; but as I shall explain momentarily, it is quite different. And you are here at Rutgers, which is a university with a rather unique tradition.

In this variety of universities, there do emerge three principal traditions, which account for the great bulk of higher education in the United States. The first of these traditions is that of the privately controlled college or university, some of which were founded in our Colonial days: Harvard, Yale, Princeton, Columbia, Pennsylvania, Brown and Dartmouth. These were founded before our Independence because the people on this side of the Atlantic Ocean could not rely on their mother country for the education of needed lawyers, teachers, doctors, nor, most of all, clergymen.

*President Mason W. Gross' address was delivered during the Opening Session, following the Reception and Dinner in honor of the Italian University Rectors and their wives, March 16, 1970, at Rutgers

In those days, a treacherous voyage across the ocean was just too much. Therefore, we developed our own colleges. Perhaps the greatest thrust was towards the preparation of clergy because most of the early colleges were founded by different Protestant groups. Rutgers, for example, was founded by the Dutch Reformed Church.

Princeton was founded by the Presbyterians, and Yale by the Congregationalists. Other colleges also had church connections when chartered, but in effect they are now completely devoid of any specific religious orientation. While they may currently receive some moneys from governmental sources, basically their support is from private endowment and student tuition fees.

The curriculum of these early colleges was classical. Here the emphases were on Greek and Roman literature and authors. The notion was of taking care of the whole man, his mental education, and training in morals. All this was the responsibility of early tutors. But the main purpose was to train leaders for a new society. This was, of course, what Rutgers was supposed to do - - to prepare leaders, who would take over their communities in terms of intellectual leadership or professional services.

The curriculum, was undoubtedly rigorous. Students learned their Latin, their Greek, their Hebrew, their Bible; and they read Plutarch. At the time, it is interesting to note, science was not taught. Science as a discipline was not introduced into the curriculum in America until the middle of the 19th Century. It was strictly a classical program, in which everybody read the same thing; every body knew the same subject matter; and, oddly enough, it worked. For example, our early Presidents of the United States, with the exception of George Washington, our first, were all graduates of these Colonial colleges: John Adams from Harvard, Thomas Jefferson from William and Mary, James Madison from Princeton, James Monroe from William and Mary, and John Quincy Adams from Harvard.

The Colonial Colleges did in fact produce our original leaders. We look back now and wonder how they did it.*

The tradition of the private college, run and controlled by private citizens in the community and basically with a church affiliation, persists to the present day. We continue to have in this country many colleges and universities which have that same private tradition, or still have a church affiliation. We have now, for example, colleges controlled by Protestant denominations (Presbyterian, Methodist and Baptist churches) and many Roman Catholic Colleges. Many of our biggest universities maintain their religious connections. Boston University, Syracuse University, the University of Southern California, and many others are, for example, Methodist in origin and largely under the domination of this particular denomination. In addition, we have a great number of Catholic universities and colleges throughout the country still with a church connection. This is carrying on in the tradition of independence - - independence of any form of public control or public investment. To a large degree that independence enables these colleges today to prescribe the education of their students as well as to set standards for their academic performance.

The second tradition began quite soon after the American Revolution. It is the tradition of the state university. Originally, these institutions emerged in states which, as the country developed, had few if any private colleges for the education of the youth in a particular state. The state government itself therefore undertook the establishment of institutions of higher education, and designed them to insure that no young man, and subsequently no young woman, would be deprived of an education because of lack of financial resources. In other words, the keynote was equality of educational opportunity for the young people of that state.

* Professor Jacques Barzun comments on this point in his The American University as follows: "...what has been acquired with a will is always 'relevant.' It has become part of the structure of the mind and thus acts in every subsequent situation. It is how Latin and Greek may be useful to the statesman (if only in the way he will read a treaty or dispatch)...." p. 71.

The first state university in operation was the University of North Carolina; and the second one (I believe was first in chartering, but second in operation) was the University of Georgia. With our westward expansion, the movement spread to the Middle West. It should be noticed that most of the great state universities developed in the Middle and Far West such as Michigan, Wisconsin, Illinois, Ohio, Minnesota and California. The movement was fairly slow in getting underway in the East, where the larger number of private institutions is still to be found.

The theory of the state university from its inception was that education should be available without regard to the economic circumstances of its students. Thus, from that day to this, the tuition charges have been low. I regret to say that one of the present trends is to increase the cost of tuition at state universities for a variety of reasons; yet, the theory endures that nobody should be denied admission to a state university because of financial considerations. The private colleges, you see, being private, have become more expensive. Many had to finance their operations entirely out of their own resources and tuition charges; therefore, they have become quite high throughout the years. The state universities have remained low.

The third tradition is that of the land-grant college and universities. In 1862, President Abraham Lincoln signed a bill that had been supported for several years by Justin Morrill, a Congressman from Vermont. This bill authorized the Federal government to set aside certain grants of land in the underdeveloped West, and to allocate them to the various states in accordance with a formula, related to the population of these states. The legislatures of these states could then use this land, or sell it, so that the proceeds therefrom could be used for the purpose of establishing colleges in each state whose mission was to provide education in agriculture and the mechanic arts (engineering), as well as liberal arts studies, and training in military subjects.

So, we began to see across the country the development of the land-grant colleges. Rutgers is the only land-grant college which you are going to visit, since Michigan is a state university, and Columbia is private, both coming under the two earlier traditions. But the land grant tradition is in evidence across the country. For example, in Michigan are Michigan University and Michigan State University. You have to distinguish between the two. One cannot readily tell the difference between the State University of Iowa and Iowa State University, if you do not know the historic origins of these institutions. The State University of Iowa is a state university, while Iowa University is a land-grant college. Sometimes, these institutions are called "A and M"; so, in Oklahoma you will find "Oklahoma A and M" - the Oklahoma Agricultural and Mechanical College, which more recently has become a university. Nevertheless, like its counterparts, it continues to be a land-grant college. Rutgers, The State University of New Jersey, for example, is unique in that it is the only American university which inherits all three traditions, since it was founded in 1766 as a private college, was designated the land-grant college of New Jersey in 1864, and the state university of New Jersey in 1945.

At their inception, the land grant colleges were supposed to develop primary interests in agriculture and engineering. The reason for this obviously was land -- tremendous land areas in the Mid- and Far West. After the Civil War, land became available for agriculture, roads, railroads, canals, and all the different types of transportation and engineering. While their early emphasis was on agriculture and engineering, behind was the much more important notion that a university in this country had a social obligation - - an obligation on the part of its students and faculty to affect social change. Developing food supply was one of the most important of all, and this was where the land grant colleges were particularly successful. They have gone ahead with that philosophy and applied the idea that these universities should contribute through their programs of instruc-

tion and research to the welfare of society. That same philosophy applies today, and Rutgers is a fine example of this tradition.

I have already said that you are here at this kind of institution, because we are the only college in the United States, the only university which inherits from all three of these traditions. The only one! We were founded ten years before the Declaration of Independence, and we are, therefore, one of the old private colleges founded by the Dutch Church. Our loyalty to that Dutch Church remained pretty well fixed until about 1864. In 1864, we were designated a land-grant college, and one of the great contributions that Rutgers has made to the State of New Jersey has been both its agricultural programs and its studies in engineering. Then, later on, all the other specialized professional what-not colleges emerged, for example, the Graduate School, the Graduate School of Social Work, the Graduate School of Library Service; and although I cannot claim its uniqueness still the Graduate School of Education, for example, is also one of the contributions to University development.

Finally, in 1945, we were also designated the State University of New Jersey. The reason was that there were so many veterans returning that somebody had to provide opportunities in public higher education for the enormous number of students. So, we were then designated the university which would provide higher education without financial obligation to the young people of the state.

In 1959, as the birth rate began to catch up with us, we were called upon again by the voters, through a bond issue, to double our enrollment. In 1964, with another bond issue, we were called upon to double it again, and exactly where we go from here I do not know; but, in order to resolve this problem of making sure that every qualified student in New Jersey without regard to his economic status could find a program in higher education suited to his needs and his abilities, we are called upon constantly to grow and grow and grow.

So, as you travel around here, perhaps you have seen it already, one of the most striking things you will see about this university is mud. We are constantly building new buildings and surrounding them with mud. Hopefully, we can get some grass growing on campus, but there has been mud now for at least ten years anyhow, as we build and build and build to accommodate the increasing number of students who are qualified to go to a university and should do so.

If you talk about current trends in higher education in this country, this becomes the most important feature from its influence upon all that has happened -- that is, the increasing number of people whom we are prepared to take care of. If you go back to World War II, when the veterans came home, the first thing they did when they got home was to start propagating children. They came along in tremendous numbers. I can't understand why, but they did. So, we projected from the birth rate some eighteen years ahead that we were going to have a tremendous increase in students, because there were just more kids around. The increase started before those youngsters reached 18 years; this somewhat surprised us, because what happened was a tremendous realization of the need for higher education. Right after the war, the government provided scholarships for all the veterans returning, who wanted to go on to higher education and were qualified to do so. I would say probably two-thirds to three-quarters of those veterans had never thought of higher education before; and this opened up the whole notion that higher education was for them, that they could profit from it, that they should take advantage of. Soon their younger brothers and sisters and their younger classmates in schools began to think of this thing as something important for them, too. Therefore, long before we got to the 18 year olds, all of a sudden our enrollment started to increase, quite dramatically, because the higher percentage of the children

graduating from the secondary schools decided they must go on to a college or a university. It's hard to say what the percentage is right now; its getting pretty close to 50 per cent of all the students who graduate from secondary school in this country, now hope to find some form of higher education.

President Lyndon Johnson a couple of years ago, when he was still President, said that he hoped that by the time we reached our bi-centennial, in other words 1976, 200 years after our independence, we would have at least have two-thirds, at least 67 per cent of all the graduates of secondary schools going on to some form of higher education. Currently, in places like New York City, New York State, and around the country they are talking about "open admissions" by which there will be some form of higher education, in any program that you can think of, which any student that graduates from any school can take advantage of. Now this is a terribly important change, and it is having an effect on our curricula in more ways than I can imagine. This problem of numbers and what it means is tremendously important.

I am sure this is true also in Italy-- perhaps all around the world. It develops for us huge groups of students; it develops a difficulty getting the students together with the faculty. Now, it is true that we still have the same ratio of students to faculty that we had before; however, we are dealing always with numbers and it does not work out that way. I mean, students do not see faculty members the way they should, and faculty members do not have the opportunity to meet them individually. You will have the opportunity, I hope, during the next few days to walk down College Avenue here, and I hope that

perhaps you can do so between classes. Be prepared to step off into the grass, because the hordes of students coming down the sidewalks are going to swallow you up! This is just a phenomenon that we do not see too obviously here. Columbia will be one, and Michigan will be one, where there is a huge concentration of students. This hoard of students between classes will affect you very seriously. This is undoubtedly a factor which makes students restless. They do not feel that they have got the contacts with the faculty at hand. It also makes them feel, I think, "there are so many of us, why can we not do something about this?" So, we get some of the dramatic movements toward changes in the university. A great deal of this comes from sheer numbers. Now, I am not saying that this is the only thing, but a great deal of the changes come from numbers.

Also, I think that there is one other very important factor at work in American universities now; and I am sure in your universities too. One thing I think we have to remember is that this is the first generation which has grown up since the atomic bomb. The first generation failed to realize that if some idiot pressed a button, we could all blow ourselves up. We never had anything like this to experience. We did not grow up with it. They live with it! They live with it all the time, and this is one of the reasons I think why they get so much more upset about Viet Nam, about war anywhere, about hostilities across the world, because they see it immediately related to themselves, these dangers. I think it would be terribly bad if this world blew up in twenty years; but one thing I know I am not going to be here, and they are! We are living in a world that we have not known. Therefore, they get a little bit restless again if you come up with all the same philosophical, political, and whatnot solutions that we have had before. If we take the same benign attitude toward foolishness in Laos or wherever else it may be, they see it as a direct threat to what is going on.

There is another thing which I think is changing our whole reaction to what we have been teaching students, and that is this incredible thing called television. I understand that in Italy you have it under very good control, indeed.

We don't. But even if we did, the power of television is beyond belief. I think the impact of television has been great. All of you here are like me. You may take time out to watch television, but you resent the time because you really would like to be reading a book. This is not true of this generation at all. They have grown up with television and they may still rather read a book, but they will probably read it while the television set is on. They never lose that contact with the picture and the voice that brings things home to them.

Somehow or other, when you send them down stairs to watch television, whether it is the latest news from Viet Nam, or the latest basketball game, or whatever else it might be, and tell them do not forget to do your homework at the same time. Somehow or other, some of the subjects that we have been teaching them do not have the same immediacy or the same impact as the television set has for them, or as the same subjects had on us when we were that age. Now, this is not true of all students, of course, but I think it is true of a great many students and we have not yet adjusted to the influences that other media have upon our students. We are hoping that they are quietly learning their Latin grammar, or whatever else it may be. It just is not working out the same way. I think this is going to have a tremendous effect, perhaps in not what we teach them and how we teach them, or the importance, the relative scale of values that we try to cultivate in them, because they are developing their own scale. So I think this again is a tremendously important change.

Now, along with this we have to notice in this country at the present moment a rising tide, I think, of what I would call anti-intellectualism. This again may be the effect of television. Here in New Jersey it is most noticeable as well as in California, they are finding that politicians can get a great deal of support by attacking universities and everything that universities stand for. Sometimes they do it by attacking the restlessness of students; sometimes they attack them by raising the cost of higher education -- costs that are related to

the rising number of students. Whatever reasons they pick, Governor Ronald Reagan, in California, has made a whole political career for himself out of attacking the university and of trying to grab control of it. There are other States in the United States which are showing the same amount of manifestation. Somehow or other, there is not the response from what Mr. Nixon has called "the silent majority" supporting universities. Before, perhaps, when a relatively small number of people went to colleges and universities, they were looked upon with awe and admiration. Now that one child out of every two gets in, well, I mean, if Johnny can get in it cannot be that good. This is what I think the theory must be. By then, you do not have quite that automatic respect for scholarship, for research, for high standards of teaching. We feel that this is just another service operation and everybody ought to go and get something out of it. Therefore, we do not get the kind of support from our fellow citizens for the more expensive, perhaps, and the more difficult to understand aspects such as some of the research programs and some of the more elaborate programs in higher education. So, we are having political trouble and there are plenty of people now who can take a great deal of capital, political capital, out of attacking universities. I know that from personal experience here in the State, but I would still say that New Jersey is by no means as bad as many other States where the attack is really quite militant and quite serious. So, precisely at that moment when higher education is perhaps succeeding in reaching more people, doing more for the students of the nation than ever before, precisely at that time is it coming out of its more serious attack in recent years.

I am not able to tell you that the Administration in Washington, today, is terribly enthusiastic about education. They are very much interested in it. They like to study it, and that usually means putting off any money into it. They are all interested in it, and they are all in favor of excellence; but how do we achieve it? Do the people running it really know? Questions of this sort really means "Sorry

kids, no dough this year. No money!" This seems to be the attitude of legislators and at the moment, I would say that higher education is having a more difficult time gaining support from the public agencies than it has had before. Perhaps even the private agencies are, too.

So, while higher education is spreading, while we are adapting our curriculum to these new demands for the students, while our research programs are probably going forward at a more successful rate than ever before, all of a sudden we have run into very serious problems. It would be hard for me presently to tell you what the future will be. We have had a tremendous experiment with this three-fold conception, with the private colleges still going forward, and, I might say, that those which are Church-related are in very serious difficulties right now. There just is not the money around for them to get hold of. They are going through all kinds of attempts to transform. The Catholic Colleges for example, which were happily run for many years by the Jesuits or by other orders now are increasingly turning to laymen to support them. More and more laymen are going on their boards. And this is an interesting development. Also, I was going to say, that many of them are closing, because they simply cannot meet the financial demands of the day. That tradition, then, is in a certain amount of trouble, and the state universities are in trouble, the land grant college is changing in New Jersey because while we were tremendously successful for 100 years as an agricultural college, New Jersey is becoming, unfortunately, less and less an agricultural state, squeezed in between New York and Philadelphia as we are. The suburbs are developing and the old farm land is being picked up for real estate developments. Therefore, we have to look to new sources for support. So, we are having difficult times; but still the enterprises are exciting and great.

Now, a good question which, I think, we ought to discuss in the next few days, is whether this experiment in trying to bring in more and more students to try to lift their intellectual level is an appropriate thing for universities to do.

We have still another group of colleges in this country, more recently developed, called Community Colleges. These are colleges that have a two-year curriculum beyond the high school which were originally intended to develop certain kinds of people. Nurses, for example, need two years of college; no more. Other types of technologists and technicians and so on need no more. These colleges are developing at a tremendous rate and providing some form of post-high school education to an enormous number of people. This again is something which we ought to evaluate as it goes forward. Also, we should evaluate the relation between those two-year colleges and the four-year colleges or university. All of these are our current problems; things we are thinking about.

You are going to hear in the next few days about how we organize as a university. My friend, Mr. Swink, is going to solve all the financial problems for you. Without money it is going to be amazing. You will hear a great deal more about how universities are organized in light of our curriculum problems. I hope you find it interesting. I am not at all sure that what you will hear is going to be adaptable to your circumstances in Italy; but if it doesn't, it will have to rest upon the intrinsic interest of the program itself.

I am so happy to be sitting next to the man who denies (but I understand it is true) that he occupies the chair once held by Galileo. I will simply say to you, Sir, that in spite of all the difficulties we have, in spite of all the blocks that the legislators, governors, and others have created; in spite of all the difficulties our graduates have in adjusting to new circumstances; in spite of all the natural inertia of the faculty and their reluctance to introduce anything new in any time whatsoever, still the experience has been exciting and rewarding. The American university, we trust, is worthy of your study.

PART I

UNIVERSITY GOVERNANCE:
COMPARATIVE PROBLEMS

I. Autonomy*

In September 1969, the Standing Conference of Rectors and Vice Chancellors of European Universities held its Congress in Geneva, Switzerland. Among the topics discussed, particular attention was given to the question of university autonomy.

This topic, examined in depth in 1967-68 by a study group consisting of Professors Cotiell (Stirling), Debeyre (Lille), Raiser (Tübingen), Rescigno (Bologna), and Stjernquist (Lund), was reported at Geneva. That group's recommendations were then discussed by a commission of university rectors from every Western European nation and also from some of the Eastern countries.

University autonomy is discussed here mainly in the light of the situation as reported in Geneva for various European countries and my own personal experiences in Italy:

1. Definition and Ends

Autonomy, in its broadest sense, implies that a university is not subordinate to any hierarchy and is free to establish its own goals and course of action. In European political language, autonomy implies the independence and of a political community, /as such the status of a sovereign state. But this broad concept of international law cannot be applied to the modern university that operates within a state and in a dynamic society.

*During the Italian Rectors' visitations to American campuses, a recurring, multi-faceted topic was university administration during the 1970's. Brought into sharp focus were contemporary problems pertaining to the function of a university, here and abroad, in preserving, transmitting and advancing knowledge, and the opportunity posed by a changing academic environment and shifting community of power. Professor Alessandro Facco was the speaker. His address and participant responses appear in condensed form.

The typical European university today is a public institution which maintains close legal ties with its government, no matter what that government may be, state by state. Not even private universities, legally established as private foundations or corporations, may determine their objectives and purposes in cloistered isolation; for they, too, are bound by their institutional goals for teaching and research to the kind of society in which they operate.

On the other hand, the importance of the formation of the future leadership of a nation obliges that nation and society to intervene in the life of the university even though the institution may have been private in origin and apparently independent of the state.

Another practical limitation to complete autonomy of European universities is the financial factor, since without intervention of the state (even in private universities through indirect forms) universities could not begin to meet the constantly rising costs of operation that stem from the growing number of students and the expanding number of specializations offered. Consequently, university autonomy with respect to political power is not absolute. Instead, it is a relative autonomy that assures freedom of thought and teaching, and freedom in making decisions concerning institutional aims, maintaining all the while a "certain" independence from extra-university powers.

This definition of autonomy is rather elastic. It is interpreted quite differently in the various nations of Europe but within the bounds of freedom that the state and society leave to the university. The situation is not always established by law; rather, in most countries, the level of autonomy granted to universities is a matter of tradition.

2. External Constituencies

In order to clarify this rather vague concept, let us examine further what is the nature of university autonomy in Europe. Thus, one may decide whether the prevailing pattern of institutional authority is or is not operative.

The older faculty members in many of the very ancient universities defend absolute autonomy as a "privilege," transmitted through the years by academic predecessors and fixed by tradition, thus setting the university apart from all lower level schools where autonomy has been non-existent. In the contemporary world the above position has been gradually outdated to the degree that if a university seeks to defend its autonomy, it must now look to more valid arguments.

Autonomy should, of course, permit a university to fulfill its ends in both teaching and research, and be unfettered by all external pressures and forces. In short, autonomy should guarantee freedom to faculty members who engage in research and teaching.

This postulate of freedom is being contested today as an outworn hold-over from bourgeois liberalism. To be sure, there is a danger that the creative ideas on which research depends may be paralyzed if they are restrained a priori by dogmas or pre-conceived goals. Research by outside direction is nonsense. The same judgment pertains in the relationship between teachers and students, especially if students are to be trained to think critically or to defend their beliefs. Freedom of action and of thought is essential to attain this goal.

In the constitutions of many European states, freedom of inquiry and teaching appear among the basic rights guaranteed to the citizen; however, the freedom to teach and to search for the truth could not be realized if one did not have at his disposal the materials and instruments to do so. Today, the solitary thinker of antiquity is no longer conceivable. In the modern setting, teamwork is a basic necessity in the natural and social sciences; and this

implies university facilities and equipment if the citizen is to be able to fulfill a right guaranteed him by the constitution.

For this reason, some constitutions, among which is the Italian, have expressly guaranteed the autonomy of universities. In West Germany, however, such an explicit declaration is lacking; but the principle, nevertheless, is established by deduction from constitutional doctrine. This freedom stands as the major defense of the spiritual patrimony of a nation. On the other hand, there are certain political and social regimes, which deny the value of truth. They do not grant autonomy worthy of its name to their universities, probably to avoid limiting their own powers.

This justification of autonomy, as a guarantee of freedom of research and teaching, is not in contradiction with the aims of a university. Autonomy is not required so that researchers can work freely in their ivory towers; but, on the contrary, science needs freedom to serve the public better by critically analyzing both the established social order and current opinion.

Through free institutions, science can fulfill its critical responsibilities with the detachment and independence, without being subjected to the dogmas of the political and social power of the moment.

There are sectors of university life in which a faculty should accept commitments of a social nature, and others in which it must defend the institution's independence in order to reach its announced aims. For us, therefore, the postulate of freedom and autonomy can be formulated better in the sense that science constitutes a spiritual universe of dynamically interdependent elements, which can exist in various states of equilibrium. For example, it may be advantageous for certain disciplines to be supported and promoted by the

state, so long as this same state does not consider useless, or even attempt to suppress, other disciplines. On this essential point, the university must defend its freedom to cultivate even those disciplines in which the state has none or only passing interest. The only condition is it must have teachers and students who feel themselves committed to these studies.

This condition is particularly true for the basic sciences, which, while not aiming at short-term applicability, condition the every advance that is made in the applied sciences.

3. Forms of Autonomy

The ancient European universities have a common historical origin; but as early as the end of the Middle Ages, considerable differences could be found from one country to another:

a) European universities may be divided into two large categories: 1) state universities, and 2) private universities.

In continental Europe, state universities are predominant, the exceptions being the Catholic universities in Italy, France, Belgium, and Holland, and the free universities of Brussels and Amsterdam.

In Italy, there also exist other private universities (the Bocconi University in Milan and the ancient University of Urbino are examples). There is, however, a modern trend toward the establishment of private universities fait accompli, thus forcing the state to recognize and finance them.

In Great Britain, on the other hand, there are only universities created by foundations, divided into three types, according to structure: 1) the ancient universities of Oxford and Cambridge, on which the University of London is also patterned; 2) the Scottish universities, and 3) the more recently established civic universities.

At Oxford and Cambridge, the organs of university government are composed of teachers; it is thus a corporate organization. In the other two types, "lay" personnel from outside the university are also included, not as representatives of the government, but as delegates of society.

British private universities have a priori a greater autonomy with respect to the state -- not in the absolute sense inasmuch as their universities are often subject to a practical dependence upon the Church or some other agency that ensures economic existence. Furthermore, the University Grants Committee sufficiently guarantees autonomy from state pressures inasmuch as state finances are distributed through this agency.

b) The state universities of continental Europe are financed and organized by the state, which exercises a right of control over them. Teachers are state employees. The margin of autonomy varies greatly from country to country. The statutes of the various universities unite two elements that are not necessarily in agreement: on the one hand, they are state institutions and part of the state administrative apparatus; and, on the other, they are autonomous, non-profit organizations, whose members claim the right to make decisions concerning the management and development of the university. The degree of autonomy depends on which of these two elements prevails over the other.

In the French universities, since the time of Napoleon's reorganization, the first element has prevailed. The Facoltà (the various schools in which the university is divided) and the university council have a certain independence in management; but the power of decision-making remains in the hands of the state bureaucracy. The Rector is appointed by the Head of State; and, since he is also in charge of all other schools in his district, he primarily represents the Minister of Education and only secondarily, the autonomous administration of the university.

In Spain, Portugal, Greece, and other European countries, state control is even stronger.

In France, the Faure reform has increased autonomy, bringing universities closer to the situation prevalent at institutions in other European countries (Germany, Switzerland, Austria, Italy, Benelux and the Scandinavian countries, with some differences in detail). In these countries, the most common type of organization provides for a Rector, elected from among the professors for a certain period, and a senate made up of professors and presided over by the rector. The senate is usually made up of the deans of the various schools, in turn elected by the professors. The competence of these corporative organs is often limited strictly to university questions (teaching and research). The management of financial problems is entrusted instead to an administrative council, in which the state is variously represented and in which the rules of management conform with those of the state administration.

In Italy, a university reform, which it is assumed will increase autonomy, is now pending in Parliament. A National Parliament (a National University Council), in which all the principal universities, all the components of the university community (students, professors, non-teaching staff), and society in general (by means of representatives of the Italian Parliament and not the state bureaucracy) will be represented, will establish policy and guidelines from the point of view of both national university planning and evaluation of financial needs. Its proposals will then be referred to the government and legislature for action.

The proposed National University Council, if established, will be presided over by the Minister of Public Education and the executive arm will remain the Ministry of Public Education (in this sense, Italian universities will trail, with respect to the English University Grants Committee). Two factors, however, may work to change this situation. First, the establishment of regional governments, provided for in the Constitution and due shortly to become a reality, will decentralize some of the powers now in the hands of the Ministry of Public Education, giving greater possibilities for local autonomy. Second, the growing demand for education in Italy has turned the Ministry of Public Education into an elephantine body, whereas the new Ministry of Scientific Research is still in a phase of organization. Many Italian university professors and the Standing Conference of University Rectors have expressed the opinion that it would be advisable to remove the universities from the jurisdiction of the Ministry of Public Education and set up a Ministry of Higher Education and Scientific Research. If so, one assumes such a change would give a stimulus to the universities and to the positive outcomes of the reform.

At the local level, the reform act calls for a University Council (Consiglio d'Ateneo), made up of a hundred or so representatives of the various components of the university community, and representatives of the local authorities and certain professional categories. This council would elect the Rector from among the professors, along with an Executive Council to run the university from the administrative point of view. The Facoltà (Schools), which are today far too large from the numerical point of view, would be broken down into departments, which will independently administer the budgets assigned to them through an Executive Council.

This new structure will increase university autonomy, since the government will have no representatives in the University Council, as it now does in the Board of Administration. It is possible, too, that the new system of regional governments will also lead to different ways of interpreting the reform from region-to-region.

Such development is already underway in Federal Germany, where, since the Second World War, the universities have in general increased their autonomy. In the old Prussian universities, autonomy was limited to the teaching and scientific study, whereas all administration was in the hands of a "Curator", appointed by the government. Today, in most German universities, this figure has been replaced by a Chancellor -- also appointed by the government -- but subordinate to the Rector, who thus has greater possibility to defend autonomy.

Other German universities have arrived at the creation of a Kuratorium, a mixed Board of Administration, including representatives of the government and of the professors, together with other experts from society-at-large. This situation is close to that now existing in Italy. Moreover, a reform is now under consideration in Germany that will admit representatives of the other components of the university community, over and above the professors, into the decision-making bodies. Both in Italy and in Germany, there are experts who fear that the splitting-up of university representation within the governing bodies of the university may lead to a lesser degree

of autonomy with respect to the central government. Although such may be the case initially, one wonders whether this effect will progressively disappear as the various components of the university community gain an awareness not only of the points on which they disagree, but also of their common responsibilities toward society and the university institution.

Sectors of Application. In general, the pattern of decision-making in state universities is changing. For example, the right of state universities to establish their own statutes and by-laws is closely conditioned by the State. The same condition exists at private universities throughout Europe; for these institutions need state recognition for the degrees they grant. In the various European countries, the university by-laws are established within the framework of state laws which leave varying degrees of local autonomy, within which the universities must draw up their statutes. England is the country where university autonomy is best defended. In Italy, the appointment of the various academic authorities is still an internal affair of the university, without interference from the government; but, in many countries the Rector and other officials are still government appointees. This severely binds autonomy.

Scientific Research. The individual autonomy of the researcher is in general the least contested. He has been free to set his own programs and working methods. Limits on this autonomy occur only when his autonomy comes into conflict with that of his collaborators, or when the researcher neglects his university research commitments, either because of contracts with other agencies or because he practices a private profession. There are, likewise, certain decisions that do not concern the individual researcher, but which the university must make: decisions concerning courses of study, the establishment of chairs and institutes, and priorities to be

assigned to various courses or research projects. Here, the limitation of autonomy is often constituted by the financing bodies (either state or private) which, with their decisions, can more or less directly bind the university's freedom of choice.

Teaching. Throughout Western Europe, individual freedom in teaching is validly defended. With regard to admission of students, curriculum offered, and degrees granted, perhaps the greatest autonomy is to be found in Great Britain. In other European countries, the state regulates which schools provide entrance to the university; and it also sets the structure of university curriculums at the national level. Since university degrees have legal value, the state feels it must guarantee a common level for degrees granted by all universities.

A serious blow to this situation has recently been dealt in Italy--a blow that, if properly used, will also mark an important step towards greater autonomy. Students may now submit personal study curriculums to the Facoltà (Schools) for approval, even though these are in contrast with the curriculums hitherto held obligatory.

If the Facoltà succeed in using this instrument properly (which will be easier after the coming reform), Italian universities will be able to increase not only their autonomy, but also the social value of university study. Some Italian educators maintain that ^{if} Italy is to arrive at concrete results, it will be necessary to abolish the legal value of university degrees, a Napoleonic hold-over that weighs heavily on the life of Italian universities.

Another victory for university autonomy is represented by the concrete results recently reached by the Conferences of French and German university rectors in the area of student exchanges between countries and in recognition of studies abroad by the country of origin. The Conference of Italian Rectors is currently following the same road and negotiations are underway with French and German Rectors to reach an agreement concerning all three countries.

Other nations, including Austria and Switzerland, have expressed themselves favorably on such initiatives, which also have a deep political significance, since they tend toward breaking down the old barriers that separate the nations of Europe.

Selection and Hiring of Personnel. In the area of selection and hiring of teaching personnel, autonomy is well defended in almost all European countries. The state universities, although their professors become state employees, usually choose their teachers freely, following various procedures, and the state almost automatically acts favorably on their appointment. In this field, there have been cases of abuse in the system of selection. In Italy, for example, the reform will change the procedure in such a way as to guarantee greater equity; however, this equity will remain largely entrusted to the honesty of individuals, rather than to the perfection of the selection system, since a system without defects has yet to be found.

In Italy, autonomy is very weak in the area of selection of non-teaching personnel, which admittedly is of great importance in the proper functioning of a university. In this area, regional decentralization and the reform may in time do much toward improving an old and absurd situation that creates continual difficulties.

Financial Autonomy. No university in Europe is financially independent. To a greater or lesser extent, everyone must resort to direct financing by the state or by outside agencies.

In defense of autonomy in Great Britain, state funds are distributed not by the government, as already pointed out, but by the university Grants Committee, in which all the universities are represented. Funds are distributed for five-year periods on the basis of plans presented by each university, thus permitting each university to make its middle--and long--range forecasts. In the other European countries, however, there is no such arrangement. The present Italian reform, with the creation of the National University Council, may improve the situation, while still not reaching the clarity and division of powers that characterizes the English system.

In the other European countries, state financing is distributed directly to the universities (Germany and the Scandinavian countries), on the basis of a budget approved by Parliament or through a particular Ministry (Italy and France). In any event, these are annual appropriations, which may vary, and thus do not permit future planning.

Present Attacks on University Autonomy. The fact that university autonomy is relative, not absolute, means that it is tied to the political and social evolution of the country and must therefore be continually clarified and defended.

Among the most apparent phenomena in this regard is the fact that the political liberalism which so greatly contributed to the university's awareness of its

autonomous function is everywhere in crisis in Europe and being replaced by other political conceptions. Another important fact is the increased importance, for the life of society, of scientific research and professional preparation at the university level. Both these facts have increased the university's importance in society and may consequently limit its autonomy.

Then, there are certain facts within the academic community which may also lead to a loss in the university's freedom. In recent years, for instance, the European universities have undergone a process of transformation, which has increasingly removed them from the models of the 19th Century, now out-dated. This change is the result of the increase in number of teachers and students, of the extension and greater specialization in the sciences, and of the need for costly institutional equipment. As a result the situation described has led not only to a greater financial dependency on the state, but also to a splitting-up of the university structures (institutes and departments), which brings with it a danger that awareness of university life as a whole will be lost. Furthermore, many institutes, faced with increasing expense for research, are forced to seek financing from other organizations, with the ever-present danger of cutting themselves off from university life.

The student activist movement, rampant throughout Europe, will either subside as a result of reforms leading to student participation in university management; or it will result in increasingly frequent state intervention to restore order and thus fatally lead to a reduction in the university's freedom of action.

As already noted, the interest of the state and society in university problems is steadily increasing; both attempt to regulate the life of the universities, even when things are running smoothly from the point of view of internal affairs.

This tendency on the part of states to increase their presence within the life of the university has recently become evident even in those states that were at one time the most liberal, such as the Scandinavian countries. The reasons are essentially three: 1) the social importance of teaching, since the future of a country depends in large measure on the intellectual potential of its new generations; and it follows that the greater demand for education requires an increase in the university's quantitative capacity, through state intervention; 2) the importance of research in maintaining the high standard of living in industrialized countries; and 3) the ever-rising cost of university education has become a national problem and governments want (and are duty-bound) to control the use of funds destined for this purpose.

Further causes for state intervention, although less pressing at this moment, can be found in the fact that the European countries, even under democratic administrations, are beginning to make use of planning, or at least to think along these lines, even if this planning is only indicative. In these countries, there is a realization that in the near future the universities have to fit into these plans, sacrificing some of their autonomy in order to serve society better. This also leads to a new ethical and political consideration of science and its function.

In the university world there are still those who believe in an auto-

life for science, a life wholly at the service of truth and independent of the political conceptions of society. This vision has, however, already been strongly shaken, not only in non-academic circles but also within the university itself.

The great development of physics in recent years has shown that the progress of science leads to continual application in practical life and that science cannot refuse the social responsibility of its discoveries.

For this reason, political power would like to enslave science. This is a field where a properly understood autonomy of science, by re-establishing basic ethical values, can defend the citizenry from dangerous deviations on the part of political power. With these thoughts in mind the following principle emerges: the cultural and social aims of the service a university performs for its country will be the higher and more valid if those who endeavor to attain them are granted a certain freedom and a distance--enough to permit critical detachment--with respect to political power.

The liberal autonomy of the past century is now out of date; however, the university, by reforming its constitution in such a way as to assure the collaboration of all its components and justly distributing its tasks among them, can stand before the state as a valid interlocutor, conscious of its duties toward society, but steadfast in its defense of those rights which alone can guarantee its proper functioning.

Finally it may be that the university will be able to accept with serenity a reduction of its present autonomy, entering into a more trusting collaboration

with the state, within the framework of national planning of the activities of the various universities; but this will be possible only if the university succeeds in keeping love of study and research alive in the young, thus guaranteeing the continuity of those vital forces--which the university has always created to ensure it the possibility of adapting and progressing within an evolving political and social situation.

(COMMENTARY)

• WATSON (Moderator) *

Mr. Alexander is a distinguished attorney, diplomat, and public servant. He is an outstanding example of a unique factor in the American University education system. As a private citizen, he dedicates great thought, time and energy to the leadership of Rutgers University. Mr. Alexander is a member of this University's Board of Governors. He has been Chairman but currently he is Vice Chairman of the Board.

Mr. Alexander was educated at Princeton, received his degree in Law from Harvard University, has practiced law, and has a distinguished career in international as well as domestic fields. I am sure that he does not wish me to go into all achievements, but you should know of his very important work with the United States Department of State, where he served as Assistant Director of the United States Arms Control and Disarmament Agency. He has had many other important positions, but we are particularly proud at Rutgers that he is in this important role as a member of the Board of Governors. Mr. Alexander.

ALEXANDER

Thank you, Dr. Watson.

Professor Faedo, Gentlemen, it is a special pleasure for me to speak with you because I am very fond of Italy. I have spent many summers with the younger members of my family in Sardinia, Elba and Venice; and I hope to return often.

Your paper, Sir (Prof. Faedo), was of very great interest to me inasmuch as many things in Italy and the rest of Western Europe are not unlike what we have in the United States. There are differences, of course.

*Identification of commentators and participants is fully made in the Appendices: from p. 302, an outline of all dialogues and panels; from p. 303, an alphabetical list of all participants, Italian guests and American hosts.

I was delighted with your comment, Sir, on page 12 of your paper, wherein you were describing the Ministry of Public Education which we consider to be rather elephantine in the United States; but, when you came to read it, you said ". . . a very large body."

The first fact about universities in the United States, that can be very confusing, is their pluralism with 50 states and numerous public and private universities. There is at least as much diversity in Europe, I assume.

Dr. Gross told you that Rutgers University was a private university at its inception, founded really by one particular church. Since 1956, which is not very long ago, it has been completely a State University, with one exception; the Governing Board, to which I belong, consists of 11 voting members. Six of the members are appointed by the Governor of the State, with the consent of the State Senate. The other five members come to the Board from a larger advisory board, called the Board of Trustees. These five members are a minority, but a strong and vocal one that represents all the graduates of the University. The Trustees are not capable under any circumstances of being influenced by the State in policy decision-making.

Those of us who worked on the New Jersey State Law that passed in 1956, and that now governs this University, were most anxious, to be sure, that the State could not interfere improperly. That has happened in other states. The law provides that, if in the opinion of the Board of Trustees, the State is interfering unduly, it may withdraw from the partnership.

This very land, on which we are sitting was given to the State University by the private university that preceded it. The endowment fund of the University

(stocks, bonds, mortgages and money) was contributed by private individuals, totaling approximately \$50 million. That endowment may be taken away too, if the State does not fulfill its contract.

The Board of Governors of this University is a bit like the trustees of a hospital, or a church; and a little like the board of directors of a business corporation. I noticed an interesting parallel, Sir, in your paper where you describe your University Senate. We are just now renovating the Rutgers Senate, with representatives from the faculty, the student body, as well as administration. We hope that it will meet often and give the Governing Board sound advice.

The University is, of course, not independent financially. We get money from the Federal government in Washington, from the State government in Trenton, and from corporations--grants, like pharmaceutical companies that may want research done. Private citizens also give gifts, and, of course, students have to pay tuition. Combined, these form the University's income.

I want to speak briefly about two other matters. One is academic freedom--something that we like you in Italian universities feel very strong about. In 1965, there was a cause célèbre. The professor's name was Eugene Genovese. He was very critical of the Vietnam War. I personally thought what he had to say was in bad taste; but, when there was an outcry and the State government demanded that he be dismissed, we in the Board of Governors stood firm with the faculty and administration.

Mr. Genovese is no longer here, but not because he was fired. In 1965, the Genovese matter became an issue in the election for Governor and legislature. The then Governor supported our position. I am glad to say that he was overwhelmingly re-elected. I hope this shows that the general public, though Professor Genovese was unpopular, were ready to support our stand and voted for academic freedom.

The other subject that I desire to mention has to do with the question of student deferment.

You have tactfully referred, Sir, to it in your paper; so, it is a phenomenon around the world.

Here in the United States, students do not like Vietnam. They do not like the war. They are beginning not to like what our society is doing to the ecology; and, increasingly they are questioning the relevance of what they are expected to learn in college. Bear in mind, we now have students in the University Senate. We do not have them on the Governing Board, mainly, because that would require an act of the State legislature. In my opinion, we are being rather laissez-faire about what action they take. Whether that is good or bad, who am I to judge? Personally, I believe there are some old truths and facts that students ought to know about; they cause us to put in perspective the problems they want resolved.

QUESTION

Is the President of Rutgers University elected or appointed?

ALEXANDER

The President is elected by the Board of Governors, with the advice and consent of the Board of Trustees. The whole power of recruitment, selection and election lies within the University.

When I was Chairman of the Search Committee that recommended the election of President Gross, we consulted fully with an elected committee of the faculties, with the students, with the graduates, and, of course, with the Governor of the State, as well as others. There was no question, whatsoever, that the Board of Governors--not the Governor of the State--elected President Gross.

Here at Rutgers, we consider autonomy very important. The Chancellor of Higher Education of the State of New Jersey, who roughly corresponds to your Minister of Education in Italy, is a member of the Board of Governors, ex officio, and without vote.

MADIA

Maybe you could clarify one point?

If I understood you correctly, you said that the President was elected "with the consent of the Board of Trustees." What does that mean? Does the Board of Trustees have a veto power?

ALEXANDER

Exactly!

WATSON

May I add one point to the question you are entertaining?

I think it is important to note that the President is named to his position "with unlimited tenure." President Gross has served here for eleven years and has never been re-elected.

ALEXANDER

Yes, he serves "at the pleasure of the Board." I should also point out the fact that President Gross has tenure as a Professor; as the President he does not have tenure.

VACCARO

What does the President do?

ALEXANDER

He runs the University. It is like a corporation where the president runs the company, but the board of directors chooses or dismisses the president and sets policy.

The Board of Governors meets, usually, once a month, all day. Personally, I think it very important that the Board of Governors does not try to administer the University. It should merely set policy, and delegate to the President the full task of administration. You may be quite sure, nonetheless, with a President as capable as Dr. Gross that much of the policy that the Board of Governors adopts is first suggested by him.

ROLLA

In the other state universities is the organization the same as Rutgers or are there differences?

ALEXANDER

I think this is unique. In most states the entire governing board is subject to appointment by the state. Here, five of the 11, who vote, come from somewhere else.

I might interpose that I have been on the Board since it started, and there have been many divisive issues, but no one can say that those who were appointed to the Board by the State are always on one side, and those who represent the private sector are on the other.

QUESTION

Is there interference in any other respect? I refer to teaching, research, financial allotments to departments, or the University's dependence on Federal government for research funds?

ALEXANDER

So far, the answer has been no interference in University's academic or research programs either by the State or Federal governments.

PANE

May I as a teacher add testimony to the statement just made? There has never been any interference throughout my long tenure at Rutgers either as a professor or department chairman.

QUESTION

In the area of scientific research is this also true? Has there been no instance of personal interference?

ALEXANDER

Let me make this comment on that. The Federal government wants to know how to make war better. It wants better weapons. It has research money. You may draw your own conclusions. Is that the sort of thing you had in mind?

ANSWER

No.

QUESTION

I am interested primarily in knowing whether there currently exists any kind of interference in academic or research activities?

ALEXANDER

I believe the sort of thing described has not shown itself here at all.

There are subjects like agriculture or agricultural science, where both the State or Federal governments have influenced affirmatively what should be studied because they want better agriculture. But they have never said, "You may not study aerospace engineering or nuclear physics," for example.

Internal controls are usually even more nebulous. For example, if a recognized member of the University faculty decides to apply for a government grant, his Dean would endorse the application, first checking to ensure that it contains ample provision for overhead costs. The Dean would then forward the application to the Dean

of the Graduate School of Arts and Sciences, who is the Coordinator for University Research and Director of Rutgers Research Council. Assuming the application is approved at each level, it then goes to the University Research Contract Office where it is appropriately endorsed and forwarded for action.

CARNACINI

On matters pertaining to university control and autonomy, these ideas are not very clear in Italy, probably because of our historical tradition and evolvement from the medieval university, when each separate institution was sovereign. Our Constitution states that the universities "are autonomous within the limits prescribed by law." Once in a while the "limits" are forgotten.

The American system is extremely interesting, probably because your society is so heterogeneous. There are the public interest and the private interest. Each is worthy of respect; each operates, apparently, without being offensive to the other. Thus, for us, liberty and property, autonomy and control may not be defined except within a prescription of certain limits. From a political point of view, we are each of us limited in our liberty of living together. In the university, society imposes certain obligations, and in some instances urgencies.

It is my considered judgment that we have reached a point in university development, when it is necessary to have a very close rapport between university personnel-- professors, students, administrators--and those who are responsible for the general policy of the state. This is essential because each group has a role in resolving contemporary issues. It becomes more evident that government should be a composite and it is fitting to have governing boards that represent, not only the university, but also the society wherein it operates.

ALEXANDER

The organization of Rutgers is very characteristic of the American way of doing political and civil things. It is full of checks and balances. The administrative organization chart*before you shows that it defies the laws of physics.

QUESTION

What occurs when one or more of the members of the Board of Trustees dies?

ALEXANDER

Then, his successor is chosen by his former colleagues. The Board is entirely self-perpetuating. I think it is quite wrong, but I have to say it has worked well at Harvard. Princeton, where I went to college, used to be like Harvard. Then, there were a small number of Trustees, who were elected by the graduates. Now, there are no more life-time members; and two members must come from among the graduates of the last two or three years. I must submit that Princeton was and is a great university. So, what do you deduce from that?

Maybe our system, which is quite different here at Rutgers is the best. Our system is also quite different from your Italian universities because this very large power over the University lies with laymen, like myself, who are not faculty, and, in my case, not even a graduate. I happen to live in New Jersey, however.

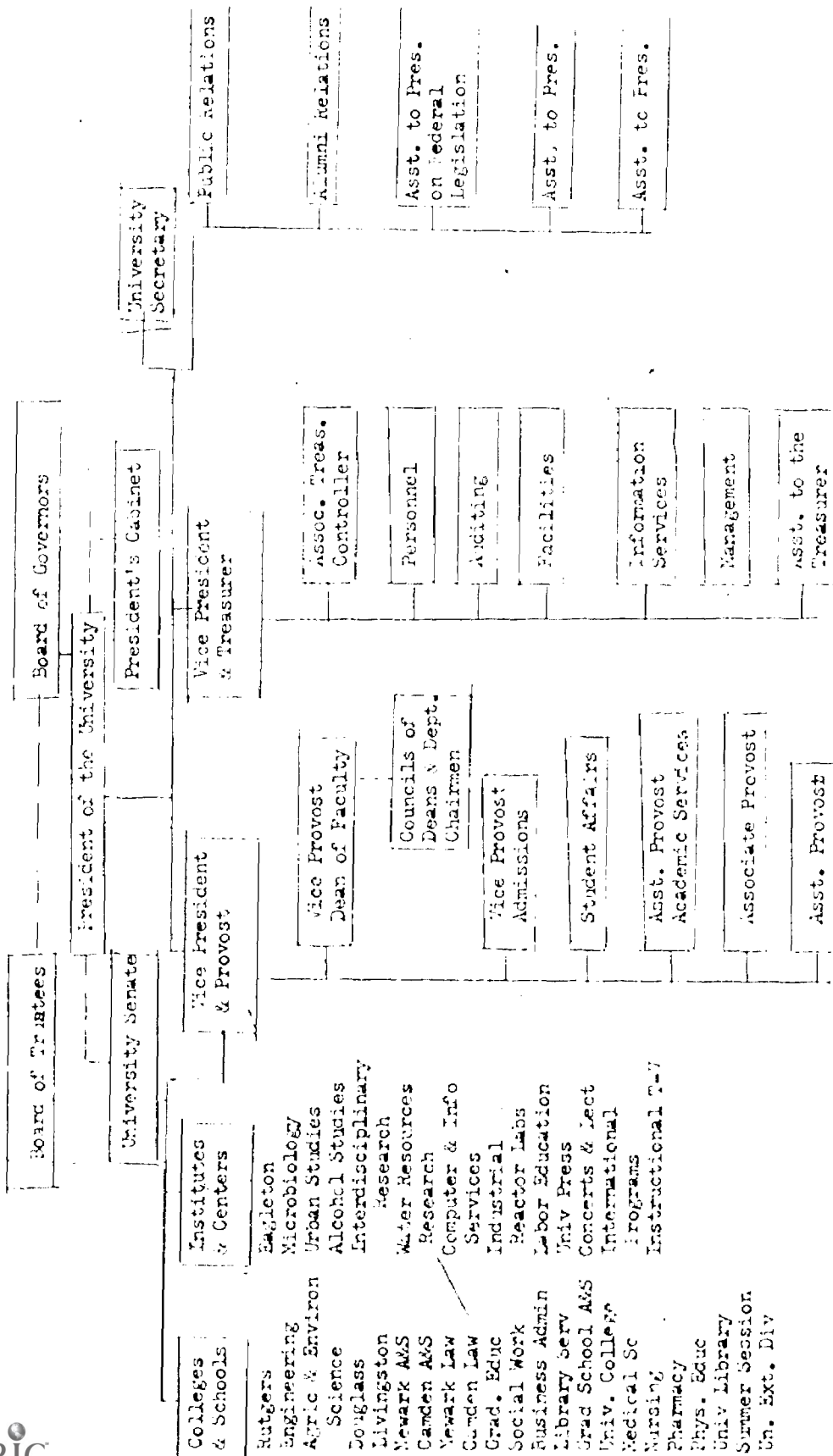
ROLLA

We would like to thank Professor Watson for moderating today at this first dialogue, and we want to express our appreciation to Professor Wilkens for providing us with the organizational chart of this University. We are especially grateful to Mr. Alexander for his description of the many aspects of university control. There are innumerable questions that my colleagues and I would like answered in greater de-

*See chart on p. 39.

tail but the pressure of time dictates that these questions will have to be posed informally and at some other time. We thank you!

UNIVERSITY ORGANIZATION



II. UNIVERSITY PLANNING AND DEVELOPMENT

1. National Planning in Italy*

The origin of the Italian University system, which some scholars trace back to the medieval Bishops' Schools and others to the Commune Schools (city or private), is closely connected with the peculiar conditions and histories of the centers in which these institutions arose. This was evidently the case of the Salerno School of Medicine, which flowered --the first in order of time-- prior to the year 1000; and was undoubtedly the case in the creation of the Bologna Studium, which owed its birth to the general cultural conditions in Bologna in the XI Century, the geographical position of the city, and the ease of communication with the cities of Tuscany, where the study of Roman law was cultivated.

In a period of time that goes from 1200 to 1600, the Studia of Salerno and Bologna were followed by the constitution and official recognition of the Studia of Parma, Padua, Naples, Rome, Perugia, Florence, Pavia, Siena, Modena, Ferrara, Turin, Genoa, Catania, Macerata and Messina, and the Studia of many other cities which seem needless to recall here inasmuch as they were relatively short-lived.

At the time of Italian unification (1860), the first problem to arise was that of the number and territorial distribution of the universities throughout the new country. The solution of this problem inevitably involved not only scientific and cultural but also political factors. Both the former and the latter excluded the suppression of the universities already existing in the various Italian states, some more ancient than others, but all with their valuable traditions.

*This paper, prepared by the Inspector General Gaetano Floridi, was not read at any of the scheduled Dialogues; but, inasmuch as it was circulated among many participants, it became the basis of an informal discussion that continued throughout both phases of the project, especially during tours of facilities in the U.S. and in Italy.

Thus, the various proposals aimed at reducing the number of universities (either by consolidating Facoltà (Schools) , located in the same geographical area, or by reducing the number of Facoltà existing in certain universities), or at redistributing them in relation to the population of ^{the} various regions, were never followed up. This was the case despite the peculiar situation of southern Italy, served only by the University of Naples, while the situation of the other regions was quite different (seven universities in the North, four in the Center, three in Sicily, and two in Sardinia).

In 1923, an attempt was made to prevent an increase in the number of universities, or at least of Facoltà, by separating the existing universities into Type A (fully financed by the state) and Type B (financed by means of conventions between the state and other organizations). The drafts of the conventions for the operation of universities of Type B had to be accompanied by suitable financial plans, as well as show that they corresponded to educational interests. Nonetheless, the attempt was impeded by a considerable and progressive increase in the number of Facoltà in this or that university center, until in 1935, the distinction between the two types of universities was finally abandoned altogether. At the same time, however, an organic concentration of the various institutions of higher education was carried out, through the amalgamation of institutions and schools of higher education into existing universities in the form of Facoltà.

At the moment of revival, after the tragic adventure of the World War II, the Italian universities found themselves in a very difficult situation as a result of the destruction of buildings and the loss of scientific equipment and libraries in many institutions. It was thus necessary to give priority to physical

reconstruction, accompanied by a no less important effort to reorganize the entire university system within the context of the restoration of democracy.

When this problem was dealt with on the legislative level, both the Government and Parliament also felt the need to come to grips with certain long-standing, but still pressing university problems, such as, the need for new institutions and distribution over the country in proportion to the growth in the student population, a growth far greater than the increase in the general population.

Compared with the 74,909 students enrolled in the university system in the academic year 1937-38, the student population in 1946-47 was over 190,000, divided among 24 state universities and six state institutions of higher education. These were located 48 percent in Northern Italy, 24 percent in Central Italy, 15 percent in the South and 13 percent in Sicily and Sardinia. Certain central and southern regions were completely devoid of university institutions (the Abruzzi, Molise, Lucania, and Calabria).

The action of the Ministry of Public Education in favor of a general reorganization of the University System was aimed not only at strengthening its structure, but also at overcoming the difficulties arising from the imperfect geographical distribution of the university centers.

Parliament, in the meantime, set up a Commission, composed of deputies and experts in scholastic, economic and social matters, to study the status and needs of public education in Italy (Commissione d'Indagine sullo Stato e i Bisogni della Pubblica Istruzione in Italia). The Commission study concluded that "the University occupies a place of primary importance among the various activities of cultural formation, not only because it prepares the future leaders of the country, but

also because, as the instrument that prepares our teachers, it constitutes the source that conditions the development of all scholastic structures."

To deal with the large increase in the number of students and the crowding of certain institutions, the Commission recommended the establishment of new universities, particularly in regions where there were none, and the creation of additional university centers in those areas where there was an abnormal growth in student population. To this end, it was suggested that a maximum number of students be established for each Facoltà and for each university, giving preference to students living in the surrounding areas. 4

The Commission also suggested the institution of dormitory facilities, with preference for those centers that could best guarantee the seclusion and tranquillity necessary for study.

According to the criteria suggested by the Commission, in the following years, two free universities were established in the Abruzzi (a region previously without a university) and one in Rome (to counteract the excessive crowding of institutions in that city), as well as a Higher Institution of Social Sciences in Trento to meet the needs, hitherto unforeseen, for a university degree in sociology.

Successively, new free institutions of higher education have been founded, and many new Facoltà have been added to the existing state and free universities in order to reduce the maximum number of students per Facoltà. Furthermore, the free universities of Lecce and Salerno have been transformed into state institutions with the aim of improving their structures, thus increasing their student capacity.

Finally, and most recently, the University of Calabria -- a residential university center -- has been instituted to provide this region, previously without a university, with a modern complex of Facoltà and new disciplines more directly connected with social development and the process of economic transformation in Southern Italy.

The creation of new Facoltà and new courses of study continues today on the basis of a much vaster program in relation to both the number of students -- which has more than doubled since 1946-47, and now stands at over 407,000 persons -- and the goals the University System has set for itself, namely to be able to "graduate" professional people and teachers at all levels in a number sufficient for the future needs of the nation.

2. The Nature of the Planning Procedure *

Discussions of the problems and activities in the physical planning of Rutgers, The State University took place during the initial seminar. Professor Wilkens emphasized the academic objectives of the University, the means of financing capital construction projects, and the status of the University as it is related to state and local government agencies.

As a background for these visits to the existing facilities and those under construction on the New Brunswick and Camden campuses, Professor Wilkens used maps and charts. Copies of the "Master Plan Concept Report" were furnished each Rector, who participated in the tours.

Introductory Considerations. Developing master plans for Rutgers University must necessarily follow many of the principles of municipal planning, particularly in those areas which, both in terms of size and physical conditions and in terms of present or future population growth, are comparable in these respects to a municipal borough or township. In both the Trans-Raritan Campuses and in the Douglass-Agricultural College Campuses, in each case consisting of over a thousand acres of land, the planning for a system of traffic circulation and pedestrian movement, the installation of utilities, the designation of appropriate uses of the land areas and the provision of services and controls for the convenience and safety of the resident student populations, present problems remarkably comparable to those of municipalities in New Jersey with populations ranging to 20,000 persons or more. To these considerations must be added the coordination and planning of land use and circulation with the plans for land use and circulation of the adjacent municipalities, with the County Master Plans for development and with those of such agencies as the State Department of Transportation whose highway development program has already demonstrated its potential effects upon the planning of the Rutgers Campuses.

* Built into the program at Rutgers were three organized tours for the Rectors, who expressed an interest in the University master plans for campus development. Professor Edward B. Wilkens conducted these tours. This statement is a condensation of his several talks on planning and blue printing University development.

With this in mind Campus Planning must give first and primary consideration to the development of broad comprehensive plans which reconcile the major policies and objectives of the above mentioned agencies. Within this structure the Master Plan must then go into considerable detail in determining the appropriate locations for individual building sites, recreational areas, and necessary services, including adequate parking and bus transportation. They must provide the maximum in the efficiency, quality, and range of choice of academic opportunities in an environment that is both conducive to these activities and within the economic limitations faced by both the University and its student body. The problem is further complicated by the necessity of reconciling current operating requirements with long-range policy within a scale of priorities representing immediate and future needs, all within a time schedule which will ensure the balanced growth of the University's physical facilities.

An effective comprehensive Master Plan must be characterized by three principle elements. First, it must reflect as completely as possible the fundamental policies of the University, i.e. academic policies, relationships to surrounding governmental agencies and general services to the State of New Jersey based upon the most complete knowledge of the physical, economic and social factors applying thereto. Obviously this calls for the most effective systems of communication, the most careful evaluation of all pertinent data, and through knowledge of physical conditions which will affect the details of implementation at the foregoing objectives.

Second, the analysis of the problems, physical conditions, and economic aspects must be the result of joint efforts with faculty members, administrative personnel and student representatives to prepare the most effective solutions to the problems under study. This involves intensive work with University committees, Deans and Executive Officers, and with interested groups of citizens and elected officials outside of the University. From these must be formed the Master Plans,

to the general organization of space, land use, and patterns of

pedestrian and vehicular circulation. These must be followed by detailed studies of individual sites in adherence to the principles established by the broad, general overall concept plans. An important element of the procedure in developing plans for eventual adoption is the preparation of a series of alternative intermediate plans to serve as the basis of discussion. These have proved to be the most effective means of reaching a final determination in both general and specific terms.

Obviously, the quality of the planning will not only be dependent upon the most effective gathering of knowledge and its interpretation, but also upon the caliber of the professional personnel which prepare it. It is fortunate that the University has available the widest possible range of experts and professional personnel whose assistance and advice can be incorporated into the planning procedure as needed. If in addition to this highly specialized professional talent, additional expert advice is needed, it can be hired and used effectively but sparingly at maximum benefit to the University.

Third, once the plan is adopted as guiding policy by the Board of Governors and until such time as substantial revisions in it are also approved by the Board of Governors, the integrity of its primary concepts must be protected from hasty decisions which may be the result of short-term problems, expediency, or false economies. Such stability is required not only to assure the development of the basic idea of the scheme to full completion and to follow a comprehensive concept but also to assure stability in the relationships between the university and its public and private neighbors. This is not say that the plan does not inherently contain the essence of flexibility in its character. It does mean, however, that to be at all useful it cannot be easily manipulated, particularly in detail, without constant checking against the basic policies of the University.

Special Considerations: External. Major influences upon planning considerations will be exerted by the following:

1. Relationship to the major state highway system.
2. The acquisition of land necessary for the growth expansion or protection of the University's interests.
3. Cooperation with local governmental agencies.
4. Establishment of University policies with regard to siting on or adjacent to the campus related institutions and quasi-public agencies.
5. Relationships with private enterprise and with the State and Federal government in the field of research.

Special Conditions: Internal. Within the limits of the University both in terms of its physical conditions and its determinations of basic policy there are a number of areas in which the form, nature and character of a Master Plan have already been predetermined or are likely to be largely influenced thereby. Among such areas of fairly firm determinations are the following:

1. Land forms and existing physical facilities of the University will naturally have a strong effect upon plan development. These include existing topographic conditions where the location and shape of the land may predetermine its eventual use for academic or University purposes. The existence of extensive capital investments in utilities and in road systems which cannot be abandoned without excessive unjustified expense will introduce strong physical and economic determinants into the planning process.

2. The existing academic activities and policy commitments also contribute strongly to the form of the Master Plan. The determination to develop a science center at University Heights resulted in the establishment of a complex of buildings which will require special study to provide them with the eventual total range of services required such as access, parking, and landscaping. The location of major buildings and residential facilities and the choice of sites

ERIC Colleges give the Master Plans certain fixed reference points around which

later development must take place. The plan must be prepared to expand upon and further implement already declared policies with regard to married student housing, the expansion of facilities for the administrative staff of the University, the establishment of new academic enterprises such as the Center for Continuing Education, etc.

Policies which have established proportions for the size of future college units to be added to the present facilities, proportions for a balance between resident and commuting students, standards for student housing as they effect dormitory types, student population densities in various campuses, accessibility of the general public to University facilities (such as auditoriums, libraries and other cultural services) set guide lines in broad general terms. In more specific terms determinations governing curricula, optimum class sizes, length and nature of the academic year, class scheduling, good service policies, etc., in the form of standards, sizes, or modular activity areas must also be reflected in the physical forms to house them.

3. Developing of indeterminate policies. Obviously the future will require changes in policies and attitudes by the University reflecting either new objectives and activities or modifications of older ones where the standards have become obsolete. In such cases the Master Plan may serve a useful purpose in pointing out the implications of various possible policies by assuming a variety of choices and conditions and presenting to the Boards a range of alternatives, sketches, or models which may be helpful in developing firm policy guides for the expansion or modification of the plan. Experience with present developments which might be considered to be in the experimental stages will also provide "feed-back" information which could form the basis for more sophisticated Master Plans in the future. Clues may be gathered from these experiences which will help determine appropriate balances between centralized and decentralized

facilities, the possible range of choices or alternatives; the speed at which anticipated development may take place, and the relative permanence or transience of present and future improvements. Among these indeterminate factors about which decisions must be reached eventually and which will provide standards for physical design and construction may be listed the following:

- a) Areas reserved for research, particularly of cooperative research between the University and outside private or other public interests.
- b) Continued exploration of the range of possibilities for providing student housing of various types at a range of costs.
- c) The provision of faculty housing.
- d) More specific policies for land acquisition, control over the rate of consumption of land by construction and disposal of excess properties.
- e) The relationship of the University to off-campus privately-operated services.
- f) Changes in educational policies affecting physical requirements and certain factors that may call for alternate models in solving the problem.

Obviously from the above examples certain factors of flexibility must be introduced into the plans in all areas where such indeterminate factors may be prevalent. This calls for an almost automatically applicable policy to provide additional future space to assure the availability of such space for a later developmental modification. The alternative is to be "locked in" to a set of facilities, a pattern of land usage and a communication system which if originally designed in a monumental scale would prove to be extremely difficult and expensive to replace. An alternative is to see that a factor of early obsolescence is built into some structures and installations to permit their easy removal and replacement in areas where the previously noted uncertainties in policy exist.

Proposed Master Plan Procedures

The following procedures are suggested as the means for obtaining the most useful, practical, and generally satisfactory Master Plans as guides to the sound development of the campuses.

Sketch Plan. It is proposed to introduce first a series of sketch plans to provide the basis for thorough discussion and also to present and illustrate the already existing and established physical features and policies from which development can take place. These sketches will be developed from surveys, estimates of the economic growth of the University, the Capital Budget proposals, and the known Master Plans of the surrounding municipalities and of Middlesex County.

Where specific guidelines may be lacking assumptions will be made representing a range of possibilities. Certain elements of the plans may be shown in a series of alternative sketches which can form the basis of discussion and the means for framing more specific guidelines.

Criticism of the Plans. The sketch plans, when they have reached a state where they can be presented as a means of discussion, will be circulated amongst all elements of the University to seek out contributing ideas and criticism towards their eventual refinement. All interested University Departments will be invited to put forth ideas, make suggestions, and develop refinements in their own area of expertise. Among such participants will be the academic Deans, administrative officials, knowledgeable individuals in the field of traffic, safety, housing, and so forth, representatives of student groups, and such professional consultants as may be on the scene with knowledge of the University's problems.

When the Master Plan effectively represents the composite of the ideas of the previous individuals consulted, it is proposed to present it to representatives of governmental agencies, and municipal governing bodies and their planning staffs for their reaction to the physical means for the implementation

of the major policies and objectives of the University. Informal contacts will be made with technicians and planning consultants working with local governments, but it is suggested that eventually the policy making boards of the local governments also be introduced to the plans of the University before final drafting of the plan takes place.

Proposed Master Plan. Following the above activities, Master Plans will be prepared for submittal to the governing body of the University. They will cover general site designations for all campus areas, and specific site designations with indications for the proposed scale and detail of development in areas which are anticipated to be active within the next five years. Circulation plans will be developed to the needs of the University and to adjacent local circulation patterns. General utility plans will be prepared showing at least the main skeleton of utility services so that they may be related appropriately to site development and to minimize any necessity of relocation of utilities in the siting of future buildings. The plans should contain also long range landscaping and land development proposals with special attention to be given to the early steps to be taken to provide proper planting and landscaping along major circulation routes, transitional or buffer areas and with special attention to the preservation of existing landscape features of high practical or esthetic value. Plans for land acquisition and disposal should also be included showing the proposed practical limits of University development indicating in terms of priority for acquisition of such lands as may be deemed highly desirable or indispensable in the protection of University growth. Other lands may be designated to be held in reserve to provide for future needs which at present are unforeseeable. Finally, a time schedule or a program of priorities for capital improvements must be presented to provide for the proper timing of development and to preserve its functional balance.

Adoption of the Plan. When the Master Plan procedures have reached the above stage of development or where certain portions of the plans are sufficiently developed, they shall be submitted to the governing bodies of the University for approval and adoption. They will then provide firm guides for development and will be available for reference in solving problems of individual building siting, providing the means for detailed development of architectural and individual building site plans which will be coordinated with the total development of the various campuses.

Review and Reporting. It is also proposed that periodic review by the governing boards take place, that reports be submitted at least annually to the boards indicating the state of development of the University in conformity with the Master Plans. At such times proposed changes in design or policy may be discussed and amendments made to the plan to keep them continually up-to-date and at the same time to keep the boards fully informed of progress in University development.

Acknowledgement

The interest created by Professor Wilkens in long range campus planning carried over into Phase II of the Project in Italy.

In all cases, but most particularly in Pavia, Bologna and Pisa, in meetings with Italian engineers and planners on the staffs of these universities, a valuable exchange of ideas and experiences took place. Many common problems were discussed and solutions were explored. In fact, Professor Wilkens found in many cases close similarities existed between Italian and American universities in terms of development. For this kind of helpful exchange, Professor Wilkens acknowledged his gratitude for the help and courtesy extended him during the visitations.

- Fd.

III. FINANCING HIGHER EDUCATION

Financing of Italian Universities*

When we talk about the sources of financing for Italian universities, we must keep in mind two historical and economic aspects that have conditioned their entity and nature for a century.

Only very recently has the Italian state found itself in an economic and political position to bring the budget of the Ministry of Public Education to a level that comes close to the needs of the nation, a nation that is today caught up, from the technological-industrial point of view, in a process of rapid progress.

In Italy, the Ministry of Public Education is responsible for all public schools, of every type and level, from the elementary schools to the university. In the five-year period 1920-25, the budget of this Ministry represented barely 3.4 per cent of the total state budget; in the equivalent period 1960-65, it represented 15.0 per cent. The increase is considerable but it is still far from being satisfactory, if for no other reason than the fact that it has in part been absorbed by the great increase in the student population.

On the other hand only very recently (1966-67) the Italian government has begun a policy of large-scale financing for education in general and for the university in particular.

In the year 1963-64, spending for public education represented 6.2 per cent of the total state budget. After a sharp decline due to

* This is an edited copy of the paper read by Rector Mario Rolla on Tuesday March 17, 1970 at Rutgers.

World War I appropriations for education rose to 7.7 per cent from 1925 to 1935, only to fall again during the period of World War II. Since then, a policy of progressive increase has won out, and it is foreseen that for 1970, appropriations for public education will reach about 22 per cent of the total state budget.

But these recent efforts have caught the central bureaucratic apparatus completely unprepared, with the result that last January the Standing Conference of Italian University Rectors urged the institution of a Ministry of Universities and Research, leaving to the present Ministry of Public Education responsibility for only elementary and secondary schools.

The second point we must consider in our discussion of financing is the fact that Italian universities are patterned on the Napoleonic model and that the reforms enacted from 1970 to the present have never succeeded in renewing the structure of the system to any depth. University autonomy has existed only in name and never in practice. The financial dependence of the universities on the State has always represented a subjection of the universities to central government offices which, through the strong bonds of financing, intervene even in questions that directly concern teaching and also, in certain aspects, scientific matters.

It is true that a different mentality, which may lead to a greater liberalization of the concept of financing, is coming to the fore today, however slowly and laboriously; but university financing in Italy will inevitably remain largely in the hands of the State, which will thus retain its preponderantly limiting influence over our much aspired autonomy.

At this point, we must remember, that, as we shall shortly see, a not irrelevant source of financing for research carried out by the universities is represented by the National Council of Research (C.N.R.) with headquarters in Rome. This Council is itself an expression of the state and draws almost all its own funds from state appropriations.

The institution by the state of schools of all types and levels of instruction, and consequently also of universities, is provided for by article 33 of the Italian Constitution.

The Third Section of this same Article 33 also states that private bodies and citizens can establish universities without financial obligations on the state. A contrariis, we can deduce that the state universities are to be financed by the state, which is what takes place, by means of ordinary and extraordinary contributions. In practice, these contributions, established through ordinary legislation, do not cover the entire need although they constitute the most important part.

Let us next consider state financing in two separate categories: direct financing and indirect financing.

1. Transfer of Funds - Directly

The transfer of funds by the state to the universities for their operation is accomplished through the agency of the Ministry of Public Education. Of particular importance in this regard is Law No. 942, dated October 31, 1966, which gave the first decisive impulse to a substantial increase in appropriations for the university, an increase

which is, however, still far from satisfying real needs.

2. Contributions for Buildings

These contributions are disbursed according to a five-year plan, beginning in 1967 and terminating in 1971.

They are appropriated by the state on the basis of requests by the universities, but here again available funds are far below recognized needs.

We can calculate that to solve the long-standing building problems of the Italian universities and, at the same time, keep up with the needs arising from the enormous increase in the student population, with the present potential of contributions, at least three five-year plans of the sort instituted by Law 641 will be necessary. In other words, we shall have to make sacrifices for at least fifteen more years, far too many to be acceptable. We can, therefore, only hope that the second five-year plan will increase building funds for the universities, with respect to the first plan.

3. Financing of Scientific Research

Through the budget of the Ministry of Public Education, the state finances part of the scientific research program carried out within the universities. The sum is indeed quite modest, however, since the ministry is allowed only about three and a half billion lire for actual research, and about five billion lire for scientific equipment.

The problem of financing research in the universities is very complex, since in Italy, the burden of expense for scientific

research falls in large measure to the National Council of Research. But this Council is under the jurisdiction of the Office of the President of the Council of Ministers, not under the Ministry of Public Education. Coordination of the activities of the Ministry and the Council of Research is, therefore, *difficult and in no way regulated by law.*

This situation does not permit sufficient harmony in the use of funds for research, if for no other reason than the fact that exchange of information between the two bodies is purely superficial.

Each of you may be interested to know that the National Council of Research administers a budget of about 60 billions lire, with which it finances laboratories and research centers, which are almost all connected with the universities, and supports basic research through contracts with university institutes as well.

4. Financial Contribution from University Associations

(Consorti)

The law regulating Italian universities states that public bodies (such as city and provincial governments) or private persons and organizations can organize to finance a university. This is the origin of the so-called "University Associations" (Consorti Universitari), which in times past played an important role, both morally and financially. They have now lost much of their importance, since the financial commitment required today is far too great. To give an example of the importance of these Associations, I might mention the fact that in 1905, the Lombard University Association, which supported the University of Pavia, provided the institution with sums equal to 30 per cent of its

total budget. Today, this aid amounts to less than 1 per cent.

5. Financial Contributions from Public Bodies and Private Persons

These contributions, which are provided for by law, are losing their importance, since in Italy the local governments (cities and provinces) very often have deficit budgets. Nevertheless, the universities do draw a certain amount of their income from this source.

Contributions from private persons are very often in the form of bequests and donations, which are deductible from income taxes.

6. Fees Paid by Individual Students to the Administration of the University in which They are Enrolled

At one time, these fees represented an important percentage of a university budget. Today, this percentage has been greatly reduced, and seems likely to fall still further in the near future, since present government policy aims at transferring the cost of university education increasingly onto the shoulders of the state. The trend is towards free university instruction.

Sources of indirect financing include the following:

1. Payment of Teaching, Administrative, Technical and Executive Personnel - Indirect Financing

University personnel (with the exception of the free universities) are ex lege employees of the state-Ministry of Public Education. It follows that staff personnel are paid in entirety directly by the state and thus the costs do not weigh on the budgets of the individual universities; but, particularly during the last two decades, the universities have found themselves faced with ever-growing commitments and have thus been forced to hire new personnel directly (particularly lecturers and assistant professors, technicians, administrative and executive personnel) at their own expense. This kind of operation is absolutely indispensable for the life of the universities today; but, as one may assume, it has undermined their already fragile budgets.

The state also finances scholarships for teaching and scientific training (both in Italy and abroad) and thus contributes to the formation of teaching personnel.

2. Use by the University of Public Real Estate

A considerable amount of public real estate is occupied by the universities, totally or partially free of charge.

Such use of public property is facilitated by the fact that in Italy the great majority of universities are state institutions.

3. Tax Exemptions

Various laws establish certain forms of tax exemption in favor of the universities, which are, for tax purposes, placed on the same level as the public administrations (for example, the state itself, the provinces and city governments, etc.). In particular, the universities are exempt from all direct taxation (private and corporate income tax), from tariff duties on the importation of

scientific equipment, and from consumption taxes; however, they are held to pay real estate taxes.

By translating the normative elements outlined above into concrete figures, it is interesting to note that, compared to the total Italian state budget for the year 1968 of 9976.8 billions lire, 143.6 billions were spent for university instruction. Thus, spending for the university represented only about 1.43 per cent of the total 1968 budget.

If we then consider that this sum was spent for 338,516 students, the figure for total enrollment in the academic year 1966-67, we come to the rather discouraging conclusion that in that year the Italian state spent an average of the modest sum of 424,204 lire per student. However, these figures, while they include the financial contributions established by Law 942 of October 31, 1966, they do not include the funds provided by Law 641 of July 28, 1967, for building renewal and expansion. Also, these figures do not include the contributions of public bodies and private citizens, the fees paid by students and part of existing indirect financing.

To conclude, let me make the following comments:

1. In the light of existing laws, the administrative autonomy of the Italian universities exists only in name and not in fact.
2. The financial dependence of the universities on the central state apparatus greatly reduces their freedom of action and, indirectly, their freedom of thought.
3. The financial contributions provided by the state are still far

from covering real needs, despite the laudable efforts made since 1967.

4. The greatest financial aid for research comes to the Italian universities through the channel of the National Council of Research. Greater collaboration between the Council and the Ministry of Public Education and an increased availability of funds for research, through either the former or the latter body, are much to be desired.

COMMENTARY

SWINK

I understand that Mr. Alexander took you down this morning to the Board of Governors and the President on this chart of organization.* This afternoon,^P it will be my pleasant duty to enlighten you with respect to the complications which these two boards (Board of Governors and Board of Trustees) give me as Vice President and Treasurer, in addition to whatever problems the President gives me, and also what problems I give them.

The operation which I shall speak on this afternoon will be that part of the University which is concerned with the non-academic and the financial part of the operation. I will try to tie-in as much as I can the associations which I have with the academic part, and the implications which financial decisions make on the conduct of the University. This is the academic side here (pointing to the chart) under the Vice-President and Provost. At the present time, Dr. Schlatter, who is in Italy, is this person. You will have speaking with you tomorrow Dr. Winkler, who will cover that part. This is the particular area of the University in which I have a concern. Under the Controller is Mr. Doak. As my associate his duties include budget and accounting, purchasing, safety department, and various other operations in that sense, including the budgeting of the whole University.

*See chart on p. 39.

We have here a Personnel Department which is mainly concerned with the non-academic personnel; however, they do cover that area of academic personnel that has to do with fringe benefits, life insurance, health insurance, and things of that nature. These services must be centralized, of course. We do not in this office have anything to do with the appointment of academic personnel other than this fringe benefit part. The Auditing Section is an internal auditing group. It is not a very large group. They audit financial records, reporting directly to me to find out whether the Controller is doing his job right along with some other people. So, he is independent from anyone except that he reports directly to me.

The Facilities Section is really broken down into two main sections: one is the operation of the entire physical plant as it exists today. This includes the maintenance, the custodial services, utilities, operation of heating plant, and things of that nature. The second part of this particular department which is headed up by the Assistant to the Vice President has to do with that part of our operation which deals with new construction. In this office, we have a small staff of architects. We have also an engineering group including the areas of mechanical and electrical. In addition, we have also a contract administration group. These people prepare the contracts that we must award to the construction trades for the erection of new building.

One of the peculiarities which we have in the U.S. and particularly in New Jersey is that we do not award a new building or a construction contract to a single contractor. By law, we must have five basic contracts: the general contractor, mechanical, electrical, heating and ventilating, and the plumbing contract. This is where our trouble starts because there is nobody in charge of operation, and the construction procedure is no stronger than the

weakest link in that chain. We are trying to correct that, but at the moment this is the way we have to operate. We are also peculiar in this respect in New Jersey, in that by law Rutgers University has control of its contract operations. We do not report to the State of New Jersey in this respect. We hire our own architects; we award our own contracts; and we supervise our own construction. You will find in most instances in the United States that state universities or land-grant institutions do not have this capability. In that connection, we can borrow money on those structures which are self-supporting. Now, we can borrow money for any purpose; but we do not do so generally because we must pay it back and the only way we can do this is with revenues. So, we do float bonds on the University's faith and credit (not the State's) for such things as residence halls, dining halls, bookstores, health facilities, student centers, or any particular activity where we have revenue and we can meet the debt. Now, in order to float these bonds, I need to get the approval of the Board of Governors and the Board of Trustees.

In this particular area there is another Assistant Vice President, whose particular role is to take care of all our computing services. He supplies also other information processes that are generated by our business operation, and services the University Registrar's Office, where we have all of our students' grades on the computer. We render reports to all students via computer printouts at the end of each half year, or semester. Also in this particular unit we furnish almost simultaneously each professor with a complete roster of his class so that when he meets his class for the second time at the latest (sometimes even on the first meeting), he knows who should be in his

class. We study systems here and try to upgrade them wherever we can. We do not have as many persons assigned in this area as we would like, but we do attempt to revise and restudy systems in order to make them more economical, and more meaningful in the management of the University.

Here we have an Assistant to the Treasurer. You might say he is more or less a "leg man" for me; however, he does have the responsibility of overseeing the University dining hall operations. The rest of his job is really a staff job, trying to meet the demands that are placed on us by the Federal government for information. He is the liason officer with granting agencies for such things as the financing of buildings, where, until very recently at least, we have gotten some support for our academic facilities by grants from the Federal government; and he is the person who prepares the applications, which we then submit to the Federal government for support. That gives you a thumbnail sketch of the administrative organization which reports directly to me.

Now, in the literature that we sent to you, the red booklet, you will see the breakdown of the University dollar. ^{*} On page 6, you will note where we get our money. While I notice from the papers we have here that tuition and fees are an insignificant amount of your Italian university dollar income, for us it is a very substantial amount; however, our percentage, of course, is much less than you will find in the case of private institutions in America, where tuition and fees are more substantial than they are here.

When we work up our asking budget and submit it to the State, what we do is to calculate the income which we expect in the next year from all sources, other than the State; and, then, essentially, what we obtain from the State is

*See chart on p. 77.

a deficit appropriation. In other words, the State decides what the total figure is to be by filling in the blank. They add up the income that the University anticipates during the fiscal year and they appropriate the difference, or deficit.

Now, the University, up until the present time, has had a rather independent role as to how we spread these dollars once we get them. Of course, we do not really ignore the program, which we submitted to the State; but we do have some leeway in the expenditure of our funds. As you can see, from this particular breakout of the University dollar, the largest percentages are tuition and fees, our auxiliary enterprises, which are the resident halls, the dining halls, bookstores, our inter-collegiate athletics, our University press and revenue producing operations, or what we call in the United States auxiliary services. Another rather substantial percentage of our income, of course, is from sponsored research. This is the money which we obtain to some degree from private corporations, but mainly from the Federal government. The National Science Foundation, for example.

QUESTION

What do you mean sponsored?

SWINK

I think we should make a distinction between revenue from Federal and State sources. The State and Federal governments do not contribute in the way individuals do. The State makes an annual appropriation through the legislature, and the Federal government makes it only indirectly through research projects, perhaps with one exception. That is through the Land grant Act. We do get a regular annual appropriation through a Federal law, called Smith-Leaver and Hatch Act, and a couple of others, which support

the University's agricultural operation at 1.57 percent.

Based on an individual's application to support a particular research project, all applications are prepared by individual faculty members. They are reviewed by the Dean of our Graduate School, and then they are processed through our Contract Research Office. When fully approved, they are submitted to the various government agencies, of which the National Science Foundation is a principal one. The National Institute of Health, which is normally health-related, of course, has been one of the causes of some of the students' disruptions on-campus. It has been a great deal easier for the people who are interested in sponsoring research to tack it on to the Defense budget in order to obtain a particular appropriation. Our students and to some extent now, our legislators, take a rather dim view of this and they now say that this procedure should be stopped. College personnel, under pressure, have said that the Defense Department may not support activities in research unless they are defense-related. One of the difficulties that this particular trend may have upon research at the university is in many instances we have been conducting pure research but it always has had the possibility of being connected with Defense. For this reason, our more militant students take exception to this kind of research at the University.

QUESTION

Is the fiscal year of the University the same as the fiscal year of the Federal government?

SWINK

Our fiscal year is the same as the State's: July 1 to June 30. Unless

there are some questions about where the University dollar comes from, we may now look at how we spend it.

As you can see from our expenditures, over here in construction and departmental research are the major items. By departmental research, we mean those activities that are conducted by the departments as pretty much an on-going part of their operation. Generally, it is financed by the budget which the particular department receives annually. The other research comes on the fringes and is supported by the Federal government or private industries, or the State to a very small degree. Money in this category is accounted for separately from the regular educational budget.

From 1958-59 until 1969-70, the total State appropriation for the operation of Rutgers University moved from \$12,500,000 to \$49,600,000. The total University expenditures during that period moved from 27,000,000 to \$101,000,000. At the present time, we are operating on a \$100,000,000 budget, in the various areas represented by Rutgers, the State University.

An Idea of how we handle our budgeting process might be of interest. At the University there are currently 31,000 who are working for a degree. About half of that 31,000 are full-time students, and the rest are on a part-time basis, plus about an additional 35,000 who are here in a non-credit status--maybe formal courses, but which do not carry college credit; or they may be courses of a week or 10 days or two weeks duration. This latter group of students are enrolled in what we call University Extension. So, we are enrolling about 60-65,000 students, of whom about 31,000 or 32,000 are eligible to work for earned degrees. There are three main campuses: -- one, here in New Brunswick, -- one in Newark,--and one in Camden; and we also have

some evening divisions that are college credited and operate in Patterson and Jersey City. In addition, some of our agricultural operations are scattered from the Northern to Southern New Jersey. We have three large farms, and County Agents in each county but one, Hudson. The number of staff members varies with the size of each county. New Jersey is subdivided into 21 counties, or political subdivisions.

A University course has a certain weight, depending upon the number of hours that are spent in class, so that the person who takes three hours of instruction a week for 15 weeks usually gets three college credits. The formal college degree requires 120 credits over a 4-year period, so he takes roughly 40 different subjects in order to get a college degree. When I say college credit, I mean a course that carries college credit in an academic course that may be applied toward fulfilling the requirements for either bachelor's, master's or doctor's degrees. The pattern varies from college to college, depending upon liberal arts or technical, but basically, as far as I know, it does not go under 120 credits. The master's degree is usually 30 credits, in addition to the 120 credits for the first degree.

I may have diverged a bit from my area of responsibility. I had better get back to finance.

In the development of our budget, the process we follow is 1) the call goes out from my office to the several deans, and 2) they in turn to the department chairmen, asking them for their best estimate of what they are going to need for the next year. We have recently changed our procedure a

little bit in order to expedite development of the budget. We now have the continuation budget which takes into account what we figure to be the inflationary increases to just continue the present budget. This we can do by just putting it through the computer. Then, we ask the academic people to give us a breakdown in four areas, which can be added onto the continuation budget. These areas are increased enrollment and services, which is what the University will be subjected to for the next year; and, then, we ask for a separate figure on any improvements they would like to make in their present operation. In doing so, they are asked to give us, in order or priority and in budget dollars, what they feel they would like to ask for. Each September, we ask for a budget figure in order of priority for any new programs. This then flows back up the line, through the deans, to my office. We then put all this information into our computer and come out with the total budget, broken down into continuation, increased enrollment services, program improvements and major new programs. Once we have this figure, then the Provost and I review it carefully. There is a major responsibility in the Provost's office for the total academic program. When we are satisfied what we want to ask for we discuss this with the President for his concurrence and we then submit it to the State Department of Higher Education and consult with them. They will then submit their specific recommendations directly to the Budget Bureau of the State, and we in turn submit our original request directly to the Budget Bureau of the State.

About November or early December, we will appear before the Budget Bureau in defense of our Asking Budget, and they in turn will then incorporate

what the Governor plans to ask the legislature for in his Annual Budget Message, which he gives in the first or second week of February. Then the Appropriations Committee of the State Legislature (usually a joint committee composed of members of the legislature and the Senate) will review the Asking Budgets of all departments and agencies, and sometime between the first of May and the first of July, we get our Operating Budget for the succeeding year. We then take the Budget and make an evaluation to determine how we are going to use these dollars. In the particular case of this year, we asked for a \$30 million increase and got only \$4 million over last year's budget. We have, of course, to take that smaller increase and divide it equitably among the various budgets and make allotments to the schools and departments in the total University.

QUESTION

Did you ask for \$30 million extra because you actually needed it; or did you expect such a curtailment in your request, and, therefore, you overasked? Did you really need \$30 million extra?

SWINK

We had a legitimate request of \$30 million. Mr. Doak and I feel that had we been given the \$30 million we could not have spent it in twelve months. It is our personal feeling that we could have intelligently and economically spent approximately \$15 million. The State Department of Higher Education had recommended in its recommendation to the Governor about \$12 million, and we felt that this was a bit low in relation to our needs, but it was not an unrealistic kind of a budget for them to support us. We feel that the budget which the Governor gave us is a tragedy, in view of the demands we are being asked to cover. I do not know if that answers the question.

QUESTION

How are you going to adapt your program to one-eighth of what you had asked for? Did you distribute those \$4 million proportionately among the different departments or schools that made requests?

SWINK

Well, the first thing, of course, to meet the situation is to delete all major new programs. In so doing, you do not improve anything you already have. You can see how these are big sums of money, then the increased enrollments. While they have given us the faculty that we need (one faculty member for every 12.6 students) we fall behind in non-academic support personnel: secretaries, technicians, trained library people, accountants, auxiliary and executive personnel, etc. The other thing we suffer is the gradual deterioration of our buildings, facilities and equipment. So in some respects it becomes a false economy because we are using up our capital with deferred maintenance and repair.

Our operation should end up only slightly favorable since there have been years in the past when we have had a small surplus, which we would then absorb the following year. So, we could raise our tuition rates maybe every other year. But it is not our object to create a surplus at Rutgers--that is to make a profit which would then be used in turn to finance other operations. Of course, you realize that in the financing of our student dormitories and dining halls, the costs are going up; and we have designed the financing arrangement in what we call "a system." By upgrading our older units, we then charge the same rate for a room in an old unit as we do in a new unit. In that way, we are equalizing the charges to the students. In brief, the older units are helping to pay for the newer units. It includes

what we call debt service. Building new units currently costs \$10,000 a bed. The debt service on that \$10,000, for say 35 years, is approximately \$800 a year (at \$80 a thousand). It costs us nothing for the older ones. So, what we do is spread the \$800 over both old and new units and have a \$400 charge with everybody getting the same rate. We end up with what is an acceptable charge for each student who has to occupy a new dormitory unit.

QUESTION

What is the relationship between sponsored research and income, and sponsored researches and services and expenses? There also appears to be "other sponsored programs" on both pages of your Report. If there is definite relationship between the two, there appears to be no profit to the University. They balance. Do they cancel one another out?

JOHN

For sponsored research projects, we account for them through what we call Restricted Current Funds. Now, a Restricted Current Fund is financed from the University's Departmental Operating Budgets. For example, Restricted Current Funds are distinct from the Operating Budget of the University. So, in effect, we have two budgets. When we receive money from any granting agency for a specific purpose, it is obviously a Restricted Fund. So, that money may not be used for any other purpose. Perhaps this is peculiarly American! This comes from notching the ears of the cattle in the West. To notch the ear of your cattle and nobody else's.

We obviously cannot anticipate all of the sponsored research at the time we are making the budget. Some of it may come in after we have established the budget; historically we would not necessarily have the funds as we project the budget for the next operating year. This should not disturb our budget which is the basis for receiving our funds from the State.

Sponsored research funds come mostly from the Federal government. We tend to show a profit on research. We do usually expect to recover overhead from the grant; so, its indirect costs are increased as a result of the research. Accordingly, we require a special indirect cost or allowance recovery of all the indirect costs we face: purchasing, personnel, building maintenance, etc.

QUESTION

Does the University receive any of the fees?

DOAK

No, not at Rutgers, but it is possible.

In our Medical School, for example, the doctors, because they are on full salary, will do some professional work and get fees for it. These fees are collected in a special account. Then, professors and deans will be able to spend monies out of that account for whatever purposes they want so long as they are related to the Medical School. What the Dean is trying to do is to give them a salary which is sufficiently attractive so that they will not have to augment their own salary by outside activities. Therefore, the School demands 100% of their time. When we get into a 4-year medical school operation, the School will have patients, and the patients will be charged for services. These services will come into this practice fund, which will help support the Medical School and will not go to the individual doctor.

QUESTION

Then, generally the salary of a professor in the Medical School will be much higher than one in another faculty?

DOAK

The Medical School salary is highest. The Law faculty is second, and all the rest are below that. The difference will generally run: a medical school faculty member, who is a professor of medicine, will get a salary of approximately \$30,000 a year. A clinical professor, will get an additional \$6,000, and a department chairman on top of that will get an additional \$4,000.

QUESTION

Are faculty of the Law School permitted to conduct activities outside the University?

SWINK

They do, to a limited extent. This depends on the Dean of the Law School. Actually, they try to restrict this "moonlighting" so that it will not interfere with one's normal function as law professor.

QUESTION

What is the range for a professor in clinical work?

SWINK

The range will be somewhere between \$20,000 and \$36,000; they may be part-time faculty and conduct their law practice in addition.

QUESTION

Are there full-time faculty in the School of Law and what are they making?

SWINK

About \$3000 under the medical school, about \$34,000. There is a big

debate in higher education about "full time". I would say that in the better professional institutions it is never higher than 12 credit hours, or 4 courses as an undergraduate teacher in one of our colleges. That is 12 hours of classroom instruction per week. Normally, one will find the faculties asking for teaching loads of 6 or 9 hours, and the trend in better universities is a 9 or 6 hour teaching load. We do not put a time clock on these people. They are also in research. One thing which I think this group ought to know is that the politicians around the state say, "My goodness! We pay you \$25,000 for teaching only 12 hours a week!"

Regarding keeping track of total hours, I cannot keep track of them. I have to depend upon their peers to keep track of them.

SOURCES OF FUNDS & ASSETS
(Major Sources)

FEDERAL - U.S.A.
Loans
Grants & Subsidies
Payment for Services (Research, R.O.C.C.)
STATE - N.J.
Annual Budget Allocation
Operations
Capital Improvements
In Laid Tax Payments
Bond Issues
Loans
Services (From State)
State Building Authority

LOCAL - MUNICIPAL, COUNTY, ETC.
Agricultural Extension
Tax Exemption
Urban Renewal

PRIVATE

STUDENT FEES
Tuition
Dining, Housing
Activities
BOOKSTORE
ATHLETICS
UNIVERSITY'S CORPORATE ASSETS
Investments
Property Sale, Management
Bequests & Gifts
FOUNDATIONS
BORROWING
SERVICES CHARGES
Use of Buildings
Parking Fees

Administration
By

OPERATIONS

TEACHING
Salaries
Scholarships, Loans
Equipment & Overhead
Library
STUDENT LIFE
Housing, Dining, Medical
Athletics
RESEARCH
Grants, Contracts, Funded

GENERAL PUBLIC SERVICES

Extension: Agricultural, General
Continuing Education
Institutes & Conferences
Athletic & Cultural Events
Publications

ADMINISTRATION, CUSTODIAL SERVICES

Pensions, Insurance, etc.
Transportation & Safety
General Administration

CAPITAL OUTLAYS, STRUCTURES

Land Acquisition (Urban Renewal)
New Buildings & Site Development
Rehabilitation, Repair & Maintenance
Interest on Borrowed Funds
Rental of Property
Local Government Services
In Laid Payments
Taxes on Non-Academic Property

KEY

General, Liquid Funds, Not Specifically Committed
Revenue Producing Project or Activity
Dedicated Funds (Earmarked)

Auxiliary Services

COMMENTARY

BASSETT

Unlike public universities which receive annual financial support from state, county or municipal governments, Columbia presents itself to the pull of private funds in support of the University.

I shall disregard entirely the sources of support that come from taxes, what we call the Tax Dollar.

For many years, colleges and universities lived largely by income from endowment-- funds that have been accumulated over many years --and by income from student tuition.

The endowment fund, in the course of time, has become progressively less and less adequate. Expenses have risen much faster than the University can accumulate large sums of investment money, on which the return would vary from five to seven per cent. Institutions that have had to rely on private support gradually have had to accept the idea of continuity, --repeated annual support efforts. Fortunately, the idea has grown quite rapidly, indeed, almost as rapidly as the increase in public money.

There are a number of different sources that have contributed to the growth of private support. First, the practice of an Annual Alumni-Giving Fund has developed, pretty much under the leadership of institutions like Princeton, Yale and Dartmouth.

Whenever a university gets its graduates in the habit of making annual contributions in support of the institution, typically it stays there because the annual contributions are of a modest amount. Usually, they range from \$10 to \$1,000 depending upon the circumstances. If a university can get its annual fund up, say to \$2,000,000 a year, you see, capitalized at five per cent, that

is a very substantial substitute for an endowment; and it is just as secure as an endowment because the number of alumni is being added to each year. So, the university continues to present alumni with the opportunity of making this annual contribution.

A second source of support, and this is rather interesting in that it has grown almost as fast as the growth of the so-called Annual Alumni-Giving Fund. It is the individual who did not go to college, but has made a fortune and wants the vicarious experience of an association with an institution of higher learning. This is usually in the form of very large gifts. This type of support has grown very substantially.

A third source of support has been in interesting enough businesses and corporations. When this effort was begun some 15 years ago, namely to encourage business organizations to support institutions of higher learning, there first had to be a clarification of the law, which was achieved. Now, it is a perfectly valid thing for a corporation officer to give some of the stockholders money, even though there is no authorization of the stockholders convened in an annual meeting. At first, this source of support created a good deal of concern on campuses because there was a fear that corporate influence would follow the gift. As a matter of fact, this has not happened. Today, business firms in America are making perhaps \$400,000,000 available annually in support of higher education. Fifteen years ago, it was maybe \$25 - 30 million.

Another source of private support is the philanthropic foundation, of which there are many in the U.S. The philanthropic foundation is more likely to accompany its gift with an identification of what the gift will be used for. It is unlikely to be given as free money for the general support of the university, or to be used by the officers of the university in ways that they may determine as most urgent. So, in a rather subtle way, the influence of the philanthropic foundation on the programs of the university has exceeded the influence

of corporate business, which does not exist in that gifts are given without "strings."

All of these sources of income come to something in excess of-- I think I remember the last figure -- a billion and a quarter dollars annually. It varies from time-to-time. It's not nearly enough to finance a large university of higher education. It is a very substantial part. This is complemented by tuition income and by some help from governmental sources, that are indirect in the sense that they give students scholarships directly. Fellowships are provided to students, which help the University raise tuition. So, it is an indirect assistance.

Without this billion and a quarter dollars annually, part of which goes to institutions that we think of as being state supported, for example, Michigan, where you have been visiting, gets a very large annual support from private sources; and certainly California, as well. Chicago is a private institution, like Columbia; but both of us get some tax money. So, the thing is becoming blurred as sources of support change; but the larger the private support, which is continuing to increase year after year, the better most of us in private institutions feel about it.

It takes virile academic administrators today. They cannot sit on top of the hill and expect this kind of thing to come flowing in at the various institutions. They must go out and discuss the nature of the institution, the programs that have been accepted and approved by the faculties and administration of the institution, and present to potential bidders the opportunity to share in this exciting experience. The university president, today, must spend maybe not less than a third or half of his time in keeping the institution nourished financially.

Comment

Everything my colleague and friend here has said is true, but there is another side to the coin which I shall describe to you. You would not be

correctly informed if you did not hear something about it while here. This is what I am going to tell you.

In the first place, in the midst of contributions that he recited to you, I think it is fair to say that only the Annual Alumni-Giving Fund is really free of cost to the institution. I do not mean that some of the monies are not sometimes allocated by the donor, but the choice of the purpose which they give it is an established University choice. So it helps, one million, two million, three million dollars a year. Everything else is an aid and a burden. Take, for example, the large gift by one individual for a building. First, it almost never pays for the entire building, because building costs increase during construction. Second, you never get ten cents for up-keep once the building is built. It is always built in the latest fashion and all the equipment costs an enormous amount. So, you have one more building and you are poorer by \$200,000 for the year.

We go to the government for support, largely but not exclusively, for the natural sciences. Support from the Federal government is very large. It is quite indispensable because no such sums would be available elsewhere for the very expensive scientific equipment and scientific personnel that we need.

The law states that the University must show its contribution towards that kind of work ranging between 5 and 10 per cent. Every grant from the government costs the University something which has to be shown. The private philanthropic foundations are the worst for two reasons. In the first place, they push projects onto the University which the University might never take up, and it is dangerous to refuse a gift because you might want to ask a foundation for money later for something you really want. So, you accept what you do not want in hope the foundations have made it a rule, which they have not broken, never to pay for overhead costs. Suppose it is a project, a study of social affairs or

political science, or something of that sort. They will pay for the time of the investigators, for the secretaries, the typewriters, telephones and paper. The University will have to supply all the rest: space, heat, light, and the administrative costs. So, every project makes the University poorer. Moreover, there is a kind of interference not intended from the mere fact that the University becomes responsible.

The faculty of the average American university has become oriented to outside donors. People of the greatest distinction come quite naturally to think that they are working for the Ford Foundation, the National Science Foundation, or a single donor. The University, as we have come to say, is just the place where they hang their hats. A secondary effect of all this, which is important in relation to money, is that an artificial shortage of academic power has been the rule for the last 15 to 20 years. That shortage has brought about competition, salaries have gone up, mobility has increased, and your best academic men are always threatening, as Dr. Basset told you, to leave and go somewhere else, where there is more money. Add to this the very important fact that student tuition fees pay on an average 40 per cent of the actual costs of education, so that the university has to find 60 per cent, add to that variously.

The corporation, the private foundation, the alumni foundation, or the company may give to the department of geology, because it is interested in shale deposits, but with no precise purpose in mind, just general connections. Of all the gifts of business corporations throughout the nation, approximately 40 per cent is what we call unrestricted. Perhaps 60 percent is for identified purposes that may or may not be directly related to a company's interests. Even where there is a purpose designated, many times and in many cases, it is for, we will say, the small liberal arts college that may have very little academic activity related to the business or company.

With respect to the competition for the funds, needless to say, it is intense. It does suggest that in the administration of our academic institutions in the years ahead, we must think, perhaps, and this gets you into the government of academic institutions, of the separation of some of these primary functions of a president or a rector, who is primarily interested with the faculty in development and academic programs. But a second person, call him Chancellor, call him whatever you will, who is responsible for finding the funds to nourish the institution, has to be sure that the funds are administered in ways that are harmonious with the academic program, that the president and his colleagues still have developed. In other words, the test, in my judgment, in administering a great academic institution in years ahead is going to be so difficult and so complex that it is quite unfair to expect one man to be able to do it.

I might add just one word or two more to what the Dean has said, which is this: so far, business contributions from corporations have been the smallest contributions to the total receipt of gifts from any source. Dean Brown may well have the feeling because he was Dean of the School of Business that the University benefits now very greatly from this support. I do not think that it does; it benefits, but it should benefit more. Presidents should do as he says; but, outside the School of Business, contributions have been potent. Would you agree? I go to a great many liberal colleges; they get from their big local corporations maybe \$20,000 a year. That goes nowhere. But I can only once again cite the figures: out of the billion and a quarter of private support, \$400,000,000. If you divide that by the total number of institutions, you do not get very much.

I think it would be an exaggeration to say that we now have, on our Boards of the private universities anything like political representation. There may be a Senator or Congressman here or there, but off hand I cannot think of one. Political influence on the funds, on the money given to the institutions, comes

at the level of the Federal Bureau of the Budget or the State Department of Education. It is administrated and is non-legislative.

Now, if you are thinking of another aspect of the difference between State and private institutions, namely what the university tends to do in response to public opinion, you find that the State legislator, let us say in Arkansas, Illinois or any State you want to name, represents to the university authority what the public wants in a way of services. In Wisconsin, subjects connected with dairy farming and forest products are very important; and, if you wanted to remove a course in dairy farming and substitute one in Sanscrit, the members of the legislative committee would say, "What are you doing?" The people of Wisconsin do not care about Sanscrit, but they do care about cheese. That would be reasonable. That kind of influence on the private university comes not at all through political channels, but perhaps through the private foundations which say we want you to take up this kind of work and we will pay you to set-up the School of International Affairs, or it comes from the Federal government that accepts one project in physics and turns down another for a project in medicine and will not take up another-- all very indirectly. This action has no specifically political context.

I notice that contributions that were originally donated for certain kinds of buildings, but which were not sufficient to erect the building, are held in a kind of escrow until the rest of the money could be collected. During the time period that the money has been sitting there, questions have emerged about the validity of the program for which the building was intended. We find ourselves, not infrequently, with the problem of determining whether to go ahead with the rest of the fund raising to fund the building, when that program is open to some serious kinds of questions either because advances in that field make it unclear how the field ought to move, or whether it would be the same field after

If we may close on an optimistic note let me state that the building in which we are sitting today was paid for entirely with private money.

One more point that I would like to make that has not been discussed this morning, namely, given the crisis of finances of universities both here and in Italy, it surprises me as an educator, that so little is done within the university here or elsewhere to rationalize the educational process itself. In the U.S. in 1968, we spent something in the order of \$50,000,000,000 directly on education, including higher education. In addition, we spent other billions indirectly on education. Of the fifty-billion that was directly invested in education, public and private money, less than 10 per cent was invested in what the business firms call research and development. On the educational concept of that 10 per cent less than 1 per cent was invested in development rather than in research, the result of which is that too little research is done, for example, in optical learning. But of the funds that are invested in such educational innovations, almost none is applied to higher education or for that matter to education through the first twelve grades. On the other side, we know that in 1971, or the academic year 1970-71, a little more than half of all the students who graduate from high school, which is a very large portion of the total population, not just of school age, will go on to universities. Yet, almost nothing has been done either in the private or the public institutions of higher learning to come to grips with the cost of education.

I would like before we terminate the discussion to introduce a topic which was not discussed this morning and that is the competition within a university. One of the reasons why we have problems, for example at Columbia, in the absence of any direct application of research on learning, is that we have the most extraordinary proliferation or expansion of courses, a large number of which are very, very small. We do not in the American university, as you probably will know, allocate nearly as much of the educational process to the students itself. The overwhelming share of higher education in the U.S. is in the classroom, both teachers and students. It

is only at the level of the doctorate that American students read extensively by themselves. In the post World-War II period, even that has changed. About a third of the time, that a student could study for his Doctor of Philosophy, is spent in classroom instruction. You and we have large classes in your professional programs in medicine, but I dare say that you do not have nearly as much classroom time for your students as we do. The consequence of this is a very considerable man-power expense for higher education. Extraordinary numbers of teachers, professors, man-power costs being what they are, became an extraordinarily large part of our budget. As I said, almost nothing is being done to determine what the optimum kind of learning situation is in the classroom. We do not even exhaust what little we do know from the modest investments that has been made in educational psychology.

Decision-Making in Italian Universities*

This report, should be understood to be one primarily referring to the contemporary situation in Italian Universities.

Since the Italian Parliament is presently entertaining an act to bring about total reform of the university system, our discussion of the present university power structure must be carried through in relation to the structure that state universities probably will assume in Italy, possibly beginning with the academic year 1971-72.

We shall also refer to certain interesting conclusions reached by the Fourth Session of the Conference of Rectors of European Universities (C.R.E.U.) held in Geneva at the beginning of September 1969.

Approximately 140 Rectors of Western European Universities attended this congress, along with a certain number of Rectors from Eastern European countries, who are not members of the Conference, but participated as guests.

As you know, the majority of Italian Universities are state institutions; and, as such, they are regulated by the laws of the state. It follows that even the smallest change in structure can be obtained only with the passage of new laws. This leads to the conclusion that adaptation of university structures to change, to progress of social, political, economic, and even to technical conditions, is quite slow. In fact, there exists a considerable lag on the part of the system in adapting to variations in environmental conditions. So long as the surrounding world registers only small changes, and perhaps not all in the same direction, a state of equilibrium is maintained and the university system does not undergo any noticeable shocks; but

* Rector Mario Rolla, in presenting this paper at the Rutgers and Columbia seminars, described the current "university law" and the pending act which would establish the rights and responsibilities of the various constituent elements involved in decision-making in Italian universities.

if external changes all move in the same direction and, particularly, if they be characterized by a convulsive precipitation of events, the consequences for the university system, which historically is extremely inflexible, are not long in making themselves felt.

In Italy, the structure of the decision-making bodies in the universities and their competence is regulated by legislative dispositions that date back to the 1930's. The three free Universities (the Catholic University, the Bocconi University of Milan, and the ancient University of Urbino) also have decision-making bodies that are identical to those of the state universities. This gives an idea of just how deeply the state permeates the structure of the universities, be they state or free.

The structure and the competence of the various decision-making bodies in Italian universities may be outlined as follows:

A University (Università or Ateneo) comes into being when a group of Facoltà (schools) are recognized by the ministerial authorities as constituting a functioning unit with didactic and scientific aims.

1. The Rector of the University. The Rector is a full professor elected by the Assembly of Professors (Corpo Accademico), made up of all the full professors of the university which we shall herein refer to as the Senior Teaching Staff. He is then formally appointed by the Minister of Public Education.

The Rector is the center of propulsion and leadership for the whole university. He presides over the Board of Administration, the Academic Senate and the University Assistance Committee and is responsible for executing the decisions reached by these three bodies. The Rector watches over the general functioning of the university, sees that regulations are respected, and enjoys a certain breadth of discretionary powers.

The full professor who is elected Rector is not exempted from his

teaching duties nor from the possible direction of an Institute. This may give you some idea of the heavy activity and responsibilities that befall the Rector of an Italian university, over and above his normal duties as a teacher.

2. The Board of Administration (Consiglio di Amministrazione). The Board of Administration is a collegiate body composed of the Rector, who presides over it, three professors designated by the College of Deans, two representatives of the Government, three representatives of the local authorities (the City Council, the Provincial Administration and the Chamber of Commerce), and the Administrative Director of the University.

For questions concerning university building development, the Board of Administration is enlarged to include: a) full professors from Facoltà not represented in the ordinary Board of Administration; b) three representatives from the Junior Teaching Staff (one associate professor, one assistant professor and one lecturer); and c) one student. Each of these additional members is designated by his respective Association.

The Board of Administration is constituted by decree of the Minister of Public Education and serves a two-year term. Its range of authority extends to all aspects of university administration, with the sole exception of problems connected with student aid and welfare, which are entrusted to a different body of which I shall speak shortly.

3. The Academic Senate (Senato Accademico). The Academic Senate is a collegiate body composed of the Rector, who presides over it, and the Deans (Presidi) of the various facoltà (schools). It has jurisdiction in all teaching matters, in problems involving the entire University and in disciplinary questions. Occasionally, the Academic Senate is called upon to express technical opinions on questions of a financial nature, which are then discussed and

approved by the Board of Administration.

Since all the Deans are members of the Academic Senate, all the Facoltà are represented in this body.

4. The University Assistance Committee (Consiglio dell'Opera Universitaria). This committee is a collegiate body responsible for the problems of student welfare and aid. It is composed of the Rector, who presides over it, two professors (one designated by the Board of Administration from among its own members and one appointed by the Rector, usually from among the Assembly of Full Professors), three students elected by their Association, and the Administrative Director of the University.

The competence of this body extends to the administration of all forms of aid to students (including health programs), housing and restaurant facilities, financial assistance and scholarships, sports facilities, etc.

5. The Council of Professors (Consiglio di Facoltà). The Council of Professors is a collegiate body composed of all the Senior Teaching Staff of each facoltà. Only exceptionally and in relation to questions of a purely organizational nature are members of the Junior Teaching Staff (associate and assistant professors and lecturers) called upon to participate in its deliberations.

The Council of Professors is competent in didactic, scientific and disciplinary matters. It decides upon appointments to the teaching staff and calls professors to occupy existing chairs (Cattedre). At times, it may also be asked to express opinions on technical and financial problems. The Dean of the Facoltà is elected by the Council of Professors from among its own members and is then officially appointed by the Minister of Public Education. The Dean serves a three-year term and can be re-elected. His duties include presiding over the Council, giving impulse to the academic life of the Facoltà in all its expressions and representing the Council within the Academic Senate.

The professor who is elected Dean is not excused from his teaching duties or

from possible direction of an Institute.

The Institutes operate within the Facoltà. They include one or more chairs, depending upon the number of full professors or associate professors with official teaching duties that work within them. The director is a professor (usually of the highest rank) of one of the subjects which are the object of teaching or research within the Institute. He is competent in teaching, scientific and administrative matters.

It may be assumed from the above outline of Italian University organization that under the present system almost all responsibilities are concentrated in the hands of the Senior Teaching Staff. If we define the field of competence established by law as "university power," within which each university body has its particular decision-making responsibilities, we may indeed say that in Italy today, university power is almost completely in the hands of the Senior Teaching Staff. Exceptions are the presence of representatives of Government and local authorities in the Board of Administration, the presence of representatives of the Junior Teaching Staff, and the single student in the "enlarged" board of Administration for decisions on building policy. Another exception may be found in the three student members of the University Assistance Committee, but here again, they are in the minority.

As we all know, the evolution of technology and the resulting increased importance of the average level of education and of basic and applied research have raised the problem of power in the universities. In this regard, it is interesting to remember that in the XIIIth Century, the Rector was elected by the student body, which convened in the Cathedral of the city for the election. The Rector was chosen from among those graduates of the university who had since completed at least six years of study. He was required to be unmarried and

commendable for his honest life. We can cite certain old chronicals of the University of Pavia in this regard, whose official foundation dates from 1361, but whose origins can be traced back to around five centuries earlier. The Rector was most highly honored and actually enjoyed precedence over all the Magistrates. He was responsible for seeing that the statutes of the university were observed, in the interest of both studies and the students, and he exercised civil and penal jurisdiction over students, without possibility of appeal.

After the Medieval period, this strongly centralized power, although of community origin, was delegated to the Senior Teaching Staff. This came about not only because of the sociological importance of university power itself, but also and primarily because of the great scientific and cultural prestige of the Masters and the community of socio-economic interests existing between teachers and the social categories with access to university education.

This state of equilibrium was progressively strengthened over the centuries through a linear development of the university structures; but, recently, as we all know, this equilibrium has been broken and a university crisis has arisen in almost all countries.

It is certainly not my intention to analyze the causes of these yet important aspects of the problem, but simply to point out that Italian universities, as for that matter, all of their sister-institutions in Western Europe, in America, and the Far East, are undergoing a serious crisis.

This crisis is one of financial means, of men, of classrooms, of libraries, institutes and laboratories; it is a crisis brought about, at least in part, by the enormous increase in the student population. But above all, it is a crisis of structure and organization, which also directly involves the problem of university power.

For the sake of convenience, power in the universities may be broken

down into the following aspects:

- a) administrative power;
- b) teaching and scientific power;
- c) power in appointment of academic personnel; and
- d) power in questions of student aid and welfare.

It is obvious that these different aspects are not independent one from the other. On the contrary, they are closely inter-related and spread by degrees over the various levels that make up the structure of the university.

Given these premises, in Italy, the essence of the problem takes the form of political and social pressure on the part of the components of the university community that are now demanding their share of power. This socio-political pressure is very strong in the Junior Teaching Staff and among the students, but it is also increasingly making itself felt among technical and administrative personnel.

Sensitive to this growing pressure, the Italian Government (which is officially center-left in orientation and composition) began some years ago to study a reform law for the universities.

Various bills were drawn and some even reached the floor of Parliament; nevertheless, all these attempts rapidly became bogged down, largely because the bills presented always turned out to be behind the times with respect to the extremely rapid evolution of the political situation.

The last of such attempts at reform, a government bill that has traveled a different road already, seems to have a good chance of becoming a reality. It is now in the hands of a Senate Committee for the finishing touches, and has, therefore, not yet been debated by either the Senate or the Chamber of Deputies.

The primary characteristic of this reform bill is a complete re-organization of university structures on a completely different basis from those of the

past. In the first place, it calls for a considerable broadening of the traditionally quite small Senior Teaching Staff, through the addition of a number of younger professors. It further provides for various forms of participation in power on the part of the student body and Junior Teaching Staff, and within certain limitations, on the part of technical and administrative personnel as well.

From what little has been made public on the study of this reform bill, we may deduce the following information which must not, however, be taken as final:

1. The University. A University Council (Consiglio di Ateneo) is to be instituted. This will be a collegiate body, composed of representatives of the Senior Teaching Staff (40%), representatives of the Junior Teaching Staff (15%), students (40%) and technical and administrative personnel (5%) together with ten representatives of the local authorities (City, Provincial and Regional Governments).

This body will be responsible for the general direction of the university policy; it will elect the Rector from among the representatives of Senior Teaching Staff and the Executive Council (Giunta di Ateneo).

The Rector will be the center of propulsion and leadership for the university as a whole. He will preside over the University Council and the Executive Council and see to the execution of their decisions.

The Executive Council will be elected by the University Council, and all components of the university community will be represented on it according to the same proportion established for the full University Council. Its responsibilities will include those now attributed to the Board of Administration and the Academic Senate.

The Rector, together with the members of the University and Executive Councils, will remain in office for three years, while the student representatives will be elected annually.

2. The Department (Dipartimento). The Department is intended to bring together in one homogeneous unit related fields of teaching and to become the fundamental structure of the university.

It will be governed by a collegiate body, the Department Council (Consiglio di Dipartimento), composed of representatives of the Senior Teaching Staff (50%), Junior Teaching Staff (20%) and the students (30%).

Its field of competence will extend to didactic, scientific, and research organization, as well as to the management of the goods and funds at the disposal of the Department.

The Department Council will also be responsible for appointments to teaching positions. Appointments to the Junior Teaching Staff will be effected in the absence of the student representatives and appointments to the Senior Teaching Staff in the absence of both students and the representatives of the Junior Teaching Staff.

The Department Chairman (Direttore del Dipartimento) will be elected by the Council from among the professors. He will preside over the Council, and will be responsible for the general direction of the Department.

3. The Course of Study (Corso di Laurea). The reform bill calls for the organization of teaching activities in the various departments with respect to the professional preparation of the students in each individual sector through the various courses of study.

To this end, a Course of Study Council (Consiglio di Corso di Laurea) will be instituted as a collegiate body, composed of both the Senior and Junior Teaching Staffs actually engaged in teaching; the students will be represented in a number equal to 70 per cent of the combined teaching staff. This Council will be responsible for organizing and coordinating the teaching activities pertinent to a particular course of study within the various Departments.

To clarify this arid exposition as well as illustrate the deep innovation in the structure of the Italian University that this reform will entail, note the following table of comparison. In this table, we have a parallel between the degree of student participation in university power as it now stands and that which will probably exist under the new law.

Participation at the various levels (administrative, teaching and research, student welfare and aid, and appointment of academic personnel) is here analyzed according to whether it is limited to information, or extended to discussion and decision.

It is clear under the present system that students have a voice (and still not a determinant voice) only at the level of student welfare and aid. At all other levels, they are excluded, except for information, which does not satisfy them. According to the new bill, on the contrary, now student participation at the administrative level will count for 40 per cent in the University Council and for 30 per cent in the Department Council. At the teaching and scientific levels, this participation will be 40 per cent in the Course of Study Council and 30 per cent in the Department Council.

The new bill does not deal with the bodies responsible for problems of student welfare and aid. This problem will undoubtedly be taken care of in some separate law and it is not improbable that student participation in this area will also be increased.

Finally, with regard to the appointment of teaching staff, student participation is excluded, just as it was in the past.

The same sort of analysis applied to the participation in problems of the Junior Teaching Staff, reveals the following:

*See charts, pp. 101-103.

1. Under the present system, on the administrative level, this participation stands at 23 percent and is limited to problems concerning building development. With the reform, it will stand at 15 percent in the University Council and 20 percent in the Department Council.
2. At the level of teaching and research, the Junior Teaching Staff will participate in its entirety in the Course of Study Council and count for 20 percent in the Department Council.
3. With regard to the appointment of academic personnel, the Junior Teaching Staff will have 20 percent participation in the appointment of its own members, but will remain excluded from decisions concerning the Senior Staff.

Such a schematic presentation, while it answers the need for conciseness, does not permit a really exact description of the step the Italian universities are about to take in order to meet the need for a modernization of their structures. Not a few are the persons who have already expressed a negative judgment to the reform of the university system, which the Italian government is preparing to carry out.

Often these are persons who cannot adapt to giving up traditional positions and who would much prefer to retain the present university structure, while conceding a few innovations to answer pressures for renewal. Others are convinced of the need for profound innovation, but also equally convinced that the general lines of the reform as established by the Government are disorganized, or contradictory, or lacking in sufficient reflection on the basic

concepts behind such innovations. Still others accuse the authors of the reform bill of not having had sufficient courage in breaking with the past, of not being able or of not wanting to elaborate a sufficiently democratic university reform. But there are also many others who see in this reform a satisfactory and honorable compromise between the past and the near future, and who, therefore, look anxiously forward to its realization in order to permit the universities to reorganize as quickly as possible according to the new system and again take up their march toward those goals that history has assigned them.

Before concluding this report, it might be interesting to sum up briefly certain conclusions reached at the Conference of Rectors (C.R.E.U.) of European Universities in its meeting in Geneva at the beginning of September 1969.

The task of studying student participation in university administration at the European level, which meeting fell to the Fourth Study Group:

Commencing with the premise that the universities are communities of teachers and students who participate, each in its own role, in human progress, the Study Group came to the conclusion that student participation in democratic and representative forms is, today, necessary for the proper functioning of a university. This student participation must take place at all the various levels of power (aid and welfare, teaching, research, appointment of academic personnel, and administration) and at all the various levels of organization (Departments, Facoltà, Universities), in such form as to guarantee the representation of the real interests of each category in the various types of problems to be solved.

Thus, for example, admitted that the degree of real interest of

students in administrative problems and in problems of student welfare and aid is different, the level of their participation should also be different: minority participation in problems concerning administration and majority participation in problems concerning welfare and aid.

On this basis, the Conference of Rectors of European Universities came to the conclusions that are very synthetically illustrated in the following table, which sums up the results of an inquiry among the 47 Rectors, participating in the Fourth Study Group.

With regard to social matters (comprising student welfare, housing, restaurant facilities, sports, etc.), the answers showed that at present in 50 per cent of the universities discussed, students participated in decision-making as a minority; in 30 per cent they participated on an equal basis and in 20 per cent they participated as a majority. Vice-versa, 60 per cent of the Rectors present expressed the opinion that in such matters students should be a majority voice.

At the teaching level (comprising the organization of teaching, the role of lectures, the role and modalities of examinations and curriculum) 60 per cent of the answers were of the opinion that students should participate in decisions as a minority, while 20 per cent favored participation on an equal basis.

The rest of the table may now be easily interpreted. Permit me, therefore, only to point out that on the research level, only 20 per cent of the answers favored even minority student participation in decision-making, with no answers in favor of equal or majority participation. Vice-versa, 75 per cent favored only the providing of information to students which, nevertheless, represents a step forward with respect to the present situation.

It is interesting to observe that 25 per cent of the answers were favorable to minority student participation in decisions concerning appointment of teaching personnel and 5 per cent actually favored equal participation on the part of students in such decisions.

Finally, we should note that 60 per cent of the Rectors present showed themselves favorable to minority student participation in decisions concerning university planning (budgets, financial questions, equipment, building and policy-making).

STUDENT PARTICIPATION EXPRESSED IN PERCENTAGES				
Power levels	Present situation		New Reform Bill	
	Information	Discussion & decision	Information	Discussion & decision
Planning (University Department)	100% --	-- --	100% 100%	40% 30%
Teaching (Course of Study and Research Department)	100% --	-- --	100% 100%	40% 30%
Social (Welfare & Aid)	100%	40%	100%	? (no less than 40%)
Appointment of Academic Personnel	Exclusive competence of Councils of Professors (Consigli di <u>Facoltà</u>)		Competence of Department Councils (without student representation).	

PARTICIPATION OF JUNIOR TEACHING STAFF EXPRESSED IN PERCENTAGES

Power Levels	Present situation		New Reform Bill	
	Information	Discussion & decision	Information	Discussion & decision
Planning (University (Department	100% --	23% (in building development)	100% 100%	15% 20%
Teaching (Course of and Study Research (Department	100% --	--	100% 100%	Everybody 20%
Social (welfare & aid)	100%	14% MAX.	100%	?
Appointment of Academic Personnel	Exclusive competence of Councils of Professors		Competence of Department Council 20% participation in appointments to Junior Teaching Staff. No participation in appointments to Senior Teaching Staff.	

C.R.E.

DEGREE OF STUDENT PARTICIPATION IN UNIVERSITY
ADMINISTRATION (enquiry among 4th STUDY GROUP)
 47 Redors' answers

		Information or no participat- Discussion ion at all		Decision		
		%	%	Minority	Equal	Majority
				%	%	%
1) <u>SOCIAL</u>	Personal proposal			20	20	60
	Present state			50	30	20
2) <u>TEACHING</u>	Personal proposal	5	15	60	20	
	Present state	50	10	40		
<u>RESEARCH</u>	Personal proposal	75	5	20		
	Present state	90	10			
3) <u>PERSONNEL</u>	Personal proposal	60	10	25	5	
	Present state	75	15	10		
4) <u>PLANNING</u>	Personal proposal	30	10	60		
	Present state	70	10	20		

- 1) comprising: student welfare, aid, housing, restaurant, sports, etc.
- 2) comprising: organisation of teaching, role of lectures, role and modalities of examinations, curricula.
- 3) appointment of academic personnel only.
- 4) comprising: budget, financial questions, equipment, building and policy making.

Geneva, September 5th, 1969.

COMMENTARY

WINKLER

One of the things that has interested both Dr. Kells and me particularly is the Italian governmental structure for the supervision of the university, where there appears to be very little place for what we call in America the public interest. By this term, I mean representation in one form or another, perhaps either as voluntary or statutory groups to represent the general public.

Mr. Philip Muccilli, who is here with us today, is an example of the public interest in that he serves faithfully as a member of the University Board of Governors.

Perhaps you recall that the Rutgers Board of Governors is appointed in part by the Governor of the State and in part from the very much larger Board of Trustees. In theory, and I think in practice as well, the functions of the Board of Governors is to represent the public in the administration of the University.

The question we raise is whether the structure I have described is possible in the Italian system of higher education; and, if not, what are the alternatives currently in operation or emerging under the reform.

FAEDO

With the reform plans now being formulated in Italy, we anticipate having what you call representatives of the public in the administrative council of the university: the mayor of the city, the president or the governor of the province in which it is located, the president of the area chamber of commerce, the president of the local savings institutions (sometimes but not always), and representatives for each of the public and private agencies that have given financial assistance to the university. In addition, there are also to be two representatives of the general interests of the public-at-large.

WINKLER

How effective do you expect the participation of these people to be? In other words, in an institution such as Rutgers, the Board of Governors is a very hard working body. It meets regularly and makes decisions. It is not simply a kind of symbol. Now, is this the case also in the Italian system?

ROLLA

Decision-making and all important administrative matters of the university are functions to be decided by this group through individual vote. Also, in the Administrative Council, the number of professors is equal to the number of non-professors, or non-academic personnel.

I should like to state that the Italian government recently has drawn a five-year plan to assist the universities in capital construction. In this particular area, the Administrative Council has among its members the following members who have the right to vote: 1) professors of different disciplines, 2) an associate professor, 3) an assistant, 4) a doctor, and 5) one student. At some universities, it is reported that the student representatives do not attend meetings. Such is the case of the University of Pavia because students are in opposition to this scheme for decision-making. They feel they are unable to influence change in the structure. They desire to have a major degree of participation in implementing law 641.

Professor Ermini is better qualified to speak on this subject because he has had a considerable part in the preparation of this phase of university reforms as Minister of Education.

ERMINT

I shall try to explain this matter as briefly as possible.

The other day at our initial session, I was much impressed with the explanation given us on university governance. I also enjoyed very much this discussion dealing with participation of the public in matters dealing with decision-making. It has always been my thesis to involve the public in policy decision-making.

The project referred was the bill, now law 2314, in which I collaborated in the drafting stage. I tried diligently not to permit the university to become a state within a state. I wanted instead to have the university emerge open and free--not a closed environment.

Professor Rolla's explanation is adequate that the local forces in the community together with representatives of the state and the government be represented on the Administrative Council of each institution. There is some slight variation, but the differences are minor.

The difficulty lies now with the rector, who is somewhat a victim of pressures. On the one hand, he must contend with the academic senate and its demands; on the other, he has the Council of Administration that is constituted principally by university administrators who repeat their requests--their demands--on him. Then, he sits with the Administrative Council where the requests and demands are usually denied. So, the rector is in a vortex -- a kind of political turntable. The issues he faces are not easily resolved. So, the proposal that I made recently in conjunction with the Minister was to increase considerably the number of representatives of the public interest.

I have always assumed that a majority of people have an interest in the general welfare. It is public money that fund education and the culture we provide is in everybody's interest. We need to know exactly what the general interests of the public are.

There is a tendency to increase the number of representatives of the university in decision-making bodies and to reduce the number representing the public. An attempt has been made to eliminate one in charge of finance, and one in administration, and one in the National Government in order that the number of students and professors may be expanded. I appreciate their motives; they are not completely in error. But the risk in doing so is the possibility of creating a baronage of students. The dangers in such an arrangement are apparent.

We have a sincere desire to reinvigorate the representation of our Italian society in the general administration of our universities.

KELLS

First, let me comment and then raise two questions concerning your description of the decision-making process in Italian universities.

My comment has to do with what we in the United States are discussing about the nature of our Boards of Trustees, which if I comprehend your presentation, are somewhat analogous to your Administrative Board inasmuch as there are representatives of the public as voting members. The concern in this country during the past two or three decades has been increasingly that such boards should not have representatives of vested interests as members. More recently, this question has become the focus of a great debate in that students and faculty members would like to increase their influence in the overall planning process and in the general administration of the university. At the same time, we have your concern about vested interests.

Some of our U.S. universities have decided to change their boards of control by adding faculty members or men who were very recently faculty members of other institutions, and in this way obtaining experience of faculty members--the so-called faculty viewpoint, but not having their own faculty as members of the board.

Some of our institutions, particularly religiously affiliated colleges, have been controlled directly by religious orders. Now, as you have probably read, this situation is changing rapidly. By and large, these institutions have chosen a solution, namely, to appoint faculty members of another college to the board, rather than add faculty members of their own.

Some of us are still concerned about the matter of inside vs. outside interests in the matter of university control in this country. I have not learned of any good, general solutions. This point leads me to my first question. In this country, we have tended toward many solutions to a problem. This may be the major difference between higher education in your country and ours.

If I understand correctly, your new legislation would be enacted by the government, and it would be applied with some flexibility, perhaps, but in general the representation and control would be established, or proportioned, or designed to apply nationwide for all institutions. In this country, among the public colleges and universities, from state-to-state, the situation would be quite different. So, my question has to do with your reactions, your view on our degree of pluralism. What are its strengths and weaknesses? Then, as you view your new legislation, will you not be under constant pressures to allow differences between institutions in this organizational arrangement?

CARNACINI

It is true, we do have a very rigid system, which stems from the Napoleonic era, with some attenuation for a few universities. For example, the Catholic University of Milan, which has a School of Medicine, enjoys having its own organization, with a preponderance of its Council of Administration in control of the academic center. The University of Milan College for Economic and Commercial Science, also a private institution, has its own particular organization.

Unfortunately, there were some other institutions until the beginning of World War II, but the fact remains, they were not able to survive because of inadequate financing. They requested and obtained the intervention of the State. As a consequence, they bade goodbye to their independence.

Currently, there is a movement to create some new universities, but thus far the efforts have all been disorganized. In many such cases, when a college emerges it will appear to be free; but eventually, if their financial resources are inadequate they ask for intervention of the state, fully realizing that they must regiment themselves.

We now have before us some regional experiments. These institutions emerged under a special statute, but I cannot say just how they are functioning. They are located in Sicily, Sardinia, Condosta and Trieste, near the Austrian border. Up to this date, their existence has had little influence on the established universities. It will be interesting to observe, if we do have the creation of regents, what will be the impact of these regional experiments and what their organizational patterns may be?

As indicated earlier, ours is the most practicable system; however, all my Italian friends know that I have attempted to introduce some changes with certain difficulty. Even within the rigid restrictions cited, our Academic Senate has grown in stature. Unfortunately, in the Administrative Council the non-academic representatives, all laymen, are not on a daily basis involved in the activity of university life and activity. They come to meetings, usually on the initiative of the president of the university, and in keeping with the order of the day they wield no influence whatsoever. They make their decisions, usually on the basis of that which is suggested by the President and the Administrative Director, and then they leave. They do not follow through on the application and execution of the particular decisions.

In order to obviate this particular inconvenience, it becomes the duty and obligation of the Rector to maintain control over the administrative officials of the university. In doing so, I have chosen to create a special "junta" or board, which has nothing to do with the "juntas" in Latin America, consisting of a few professors, partly of the Academic Senate and partly of the Administrative Council, each with his special mission in his particular office. This administrative experiment, which began about three years ago, is not recognized in Italian Law. It is something extra-legal.

FAEDO

This stand taken by Rector Carnacini in Bologna was also taken by me in Pisa with some modification. I took the stand that here was something established as the Council of the Crown, because it is an agency created by the Crown, that is to say, the Rector or President of the University of Pisa is not elected.

I am going even a little further than this in the sense that in this "junta"

or board, I have not only appointed professors, but also assistant professors and employees. For example, I have included the Chief of the Unions of the personnel of the University. While this action is also an experiment, it has produced positive results for me. For the reasons cited by Rector Carnacini of Bologna, the true political bodies would be the Academic Senate and the Administrative Council, which in effect leaves all responsibility in the hands of the Rector, who of necessity needs to have a discussion of all critical issues and to hear points of view. Therefore, I created this board, and I included professors who are not my friends, because they wanted to be a part.

I should like at this juncture to pose a question with regard to your organization at Rutgers, which I admire considerably.

I feel that the plurality and loyalty of the control systems of different universities in the U.S. permits numerous experiments. I also sense that what may happen in one university in altering its particular structure may occur in another once the constituency observes the transformation. If this be possible, I think that you have here an enviable system.

ERMINI

Now let me once more return to the question that was posed originally by Dr. Kells. What was indicated by Professor Carnacini of the University of Bologna, which is the "Mother of Studies" in Italy, and also by President Faedo of the University of Pisa, refers to the external structure of the university and a better internal functioning. It does not take into consideration the other competition that is between the inside and outside of the university.

We find ourselves in Italy, in a different situation for two reasons: Italy

is one State; it is not a federation of States. If one might not have been a member of Parliament or the Constituent Assembly and the problems discussed here were brought up, this particular problem would produce varied reactions. As you know, North and South, East and West, Lombardy and Sicily, for example, are at extreme opposite poles with completely different interests socially and economically. Despite these differences among our people, the State, the Government is one. Actually, it is now well understood because of the fear of separation. The United Italy is only about 100 years old, just one century. Italians really like one another very much; but it is very difficult for us to understand the Sicilian. The Professor here objects to this and says, "We understand one another very well!" However, our universities are uniform throughout the whole country, including our non-state universities. They put themselves in the same position as the State university, or they do not enjoy accreditation or recognition insofar as their degrees are concerned. This is the reason why a single unified state recognizes the degree as valid throughout the whole country. A degree that is earned in Milan is viewed as a degree throughout the entire country. The National Government that guarantees the value of the degree also has the obligation to give some guarantee of its claim of uniformity in its cultural content. That this is really a big problem.

Now, we come back to your point number one. For a number of years, we have been discussing in Italy the possibility of creating a Board of Regents. This would mean political Regents; therefore, it would differ somewhat from the Boards of Regents here, which vary markedly also from state-to-state, under the several state constitutions that have created them.

In the U.S., there has been a tendency for students to elect their own programs, indeed, to form their own programs. This has gone much, much further, of course, than it has in Italy. In the U.S., for about the last 100 years, you have had disciplines in which at one period there has been the demand for much more liberty on the part of the student in the selection of their studies. Then, there has been a marked reaction to this and the students have demanded their own direction, leadership and control. At the present moment, you are in a period that demands a great deal of relaxation, and in Italy, as well; but, looking into the future, I would predict that ten years from now our students will once again be saying, "You are not providing us enough leadership; you are not giving us enough direction." It is a very different system but some of our problems seem to be very much alike.

ROLLA

Professor Ermini has just said that without a relationship we shall have a conflict of interest between the State and the Regents, and between the Regents and the University. I would like to add, in order to clarify what may happen in Italy.

Regents have practically nothing to do within the universities, but with some Regents, for example Lombardy, where it is very advanced, we have interference from the Regents insofar as new programs, curriculum reform and creation of new universities are concerned. Probably, all this could lead to something positive because we should avoid the disorderly creation of new universities. Of course, there is also a negative aspect, because some politicians might want to create a new university for personal honor. From this point of view, the Regents probably will eventually interfere with the Central Government. I think that there is a point in

university development when two different kinds of pressure will be felt-- one coming from the Central State and the other coming from the Regents. This is a danger for the Italian Universities.

The universities are trying to oppose regional structure; but, unfortunately, a bill has already been submitted to the House of Representatives. If passed, the oldest universities will suffer because of the creation of new universities for political reasons, not because of any existing needs.

Professor Vignocchi of the University of Modena is very close to Professor Carnacini's University in Bologna, quite close in fact to one another. I have the feeling that our American colleagues have quite a number of doubts about the organization of our Italian universities, which are quite different from theirs, since we have an organized plan of centralized control.

Professor Carnacini introduced an interesting element in describing the sort of framework for his own experiment. Professor Faedo, President of the Conference of Rectors and Rector of the University of Pisa, similarly, has explained the system he is using called the Crown Council.

VIGNOCCHI

I think that their experiments have not been officially acknowledged by our government. While these devices are undoubtedly very positive, especially, insofar as their particular universities are concerned, they merely are experiments that are necessary if we want a university, from an administrative point of view, to function properly.

Probably in universities, like Bologna and Pisa, without experiments of this sort, we would be in difficulty, especially in the instances when a Rector was

absent because his responsibilities demanded his presence elsewhere.

I am a Rector myself. When I thought about launching such an experiment, I immediately felt that in a small University like Modena, it was not as easy to convince both the Academic Senate and the Administrative Council of the necessity of creating a "junta" or board. I reached this conclusion, because of the provisions of Bill No. 2314, drawn by a Committee, of which Professor Ermini was President. I would say there are some innovations with which I personally do not agree completely inasmuch as here are the beginnings of an idea of autonomy. I am speaking now of a bill, submitted in 1969, No. 12, containing the names of three Italian Ministers, that would give authority to a National University Council, together with the general auditors, to be in charge of curriculum programming. I repeat "National," thus avoiding any inconvenience of local interference, or of giving priority to local political interests, while at the same time extending a certain autonomy for different universities.

In the creation of new universities, or what are called "Facoltà" of Schools, we should keep in mind the local needs of the different regions that do not have universities, or have an exceedingly high number of students. We need also to keep in mind the organization, the internal organization, of all the universities. Without a certain mandated, common framework of general organization, they can still allow a higher degree of experimentation, supported by the law and supported by special provisions of our universities' charters.

BURKS

Dr. Kells would like to say a word of two about our process of university accreditation in the U.S. inasmuch as Professor Ermini spoke about this as a National responsibility in Italy.

KELLS

We have been talking, I think, approaching the topic from a number of points of view and using a number of examples, but in essence talking about the relative degree of autonomy compared to the National level. I think we have all sensed that the major difference here seems to be that our State government, although it charters, gives permission for an institution to confer degrees, and transfers to the board of trustees of that institution all of the powers that pertain to permanent custodianship of land and buildings, and all internal organizational structure, the major difference has been that in your situation the National Government is helping you to find what internal organization should be. This is not so in our case.

There is also another major difference in our two systems. In this country, we use a system of regional accreditation of peers, by colleagues, by sister institutions and by employing all appropriate resources at the local level. Let me explain. Each institution that decides to have itself examined for possible regional accreditation pays a yearly fee to a regional accrediting organization. This fee permits establishment of a permanent staff of professional people who organize evaluation teams of visitors from sister institutions. Teams may in some instances be composed of presidents or professors or members of the administrative staff, but, usually, men a) who have been gaining more and more experience in this type of endeavor, through going to another institution examining its purposes, and b) who try to ascertain whether that institution is in a good state of health, so to speak, in terms of meeting its own stated purposes.

In this country, we have six regional accredited associations. Member institutions of higher education delegate to its association the power to decide whether an institution is now or can reasonably into the future attain the ability to meet

its own stated objectives. This is done rather than prescribe a system of standards to which all institutions must aspire and meet. It also uses a process of self-evaluation for institutions that in some cases are conducted for a year or a year and a half with everyone in the institution participating in the appraisal. Then, a team of visitors comes onto the campus and conducts its evaluation.

In this country, we also have legal standards, but only to the degree that a State may approve an institution, which it had initially chartered for a certain degree. The State may from time-to-time enlarge that permission; but all of the matters of organization and of control are delegated to its Board. Legal accrediting should not be confused with our voluntary evaluation by colleagues through regional accrediting. Each regional association has a Board also. It makes a public statement about an institution, gives it full regional accreditation, or makes specific suggestions how it may improve its methods of operation. We can go into this in much greater depth because there are different procedures used for older, well-established institutions, where there is no question about their accreditation status. In those cases, every ten years, by mutual agreement, a visit is made to examine the institution and give objective judgment on problems that plague it. On the other hand, the new or struggling institution would be required to undergo the full process of self-evaluation until it can be fully recognized.

Since our system depends so heavily upon the proper functioning of a Board of Trustees or a Board of Governors, as we have here at Rutgers, I hope that you will have an opportunity to visit and see a board in operation. Second, I hope each of you may have the opportunity to study the evolution of public, and to

some degree private, higher education in Canada, where they have gone into a rather rapid, but quite thorough development of a public system within the provinces. They use a heavy reliance on "formula allocations" from the Provincial Government. To these institutions go "formula allocations" of funds annually but in accordance with an overall formula that is agreed upon and set by the member institutions in higher education. But they, too, enjoy a complete reliance upon local control and use of those funds. This is a slightly different situation from this country and very much different from your own.

QUESTION

I should like an explanation whether this process of accreditation occurs in every state?

KELLS

This is a regional, voluntary accreditation. Each region is composed of a number of States. There are six states in our region.

QUESTION

There is a federation of regional accrediting associations that attempts to see that the process involved are fairly uniform?

KELLS

Yes, we have what is known as the National Commission on Accrediting that determines policy.

FLORIDI

I am in the Inspector General of the Ministry of Education for Higher Education. In my capacity as a representative of Government, I should like to know by what manner you have control in the exercise of a profession?

You have indicated that in the U. S. a committee formed by representatives of several institutions make a report on the particular characteristics of an institution and its ability to give a degree. Now, Rector Carnacini has indicated that the Italian system dates back to the Napoleon era; therefore, when a university gives a degree, it makes possible the exercise of a profession anywhere in my country since eligibility is based upon an examination that is equal for everybody. A student who receives his degree in an Italian University receives a degree or diploma when he finishes his course. Then, he must take an examination, which is the same for everybody. If he succeeds, he exercises his profession. There are some professionals, for example, the Doctor of Medicine, who has a very grave responsibility. Here, a student who receives his degree in medicine at Rutgers University may practice only in the State of New Jersey. If he exercises his profession in another State, I understand it requires the necessity of another examination. This is very important in order for us to comprehend the difference between the Italian and the United States systems. As you know, Italy gives official recognition for all degrees. Once admitted to a profession, the practitioner may go anywhere.

V. ADMINISTRATIVE PERSONNEL: RECRUITMENT AND TRAINING

Program to Prepare University Administrators in Italy*

The administrative personnel of Italian universities forms the basic structure of university organization and includes career officials of the administrative and accounting offices, as well as clerical and maintenance staff.

Recruitment for such careers -- as with all civil appointments in the Italian nation -- is now effected through Civil Service competition, in which all citizens in possession of the required school diplomas and qualifications may participate.

Competitive examinations are announced and carried out by the Ministry of Public Education, in relation to the number of posts vacant in each career, and the winners, once included in the Civil Service rolls, are assigned to universities and institutions of higher education on the basis of need.

As a result of the enormous expansion in student enrollment, however, the universities and institutions of higher education -- in order to meet the growing burden of administrative work -- find themselves in urgent and temporary need to recruit personnel directly, without waiting for the results of the state examinations and subsequent assignment by the Ministry. Such personnel, in every category, are generally employed with a contract for a set period of time (which is, however, renewed annually for many years), although occasionally appointment is for an indeterminate period. Thus, a legal employment relationship is established which, primarily for political and trade union reasons, becomes in fact permanent, notwithstanding the temporary nature of the motives which initially determined it.

*Inspector General Gaetano Floridi prepared and circulated his paper to all participants prior to the Dialogue, held in Washington, D.C. on April 13, 1970, U.S. experimental programs.

In order to regularize the legal position of such personnel, special rules were passed authorizing the insertion of a person's name in the Civil Service rolls of the university secretariats, by means of restricted competition, including both presentation of credentials and examinations. For clerical and maintenance staff, these "open examinations" are limited to presentation of credentials but without written examinations.

Parallel to the recruitment system for administrative personnel, we should examine the relationship between the quantity of such personnel presently in service and actual need.

A commonly used criterion -- and one which offers the possibility of comparison even on an international scale -- lies in establishing a proportional relationship between the number of students and the number of administrative personnel.

In 1948, with a university student population of approximately 146,000, permanent administrative staff stood at 793, giving an employee-student ratio of 1 to 184. In 1969, this same ratio had risen to 1 to 211, inasmuch as with a permanent administrative staff of 2,406, there were 509,000 students (taking into account over 100,000 students behind in their studies, who continued to make at least limited use of university facilities).

Any increase in student enrollment necessitates an increase in administrative functions and, therefore, a very considerable increase in permanent administrative staff, if the needs arising from the ever more complex administrative functions within the University System are to be met.

But the problem that should be examined and solved with particular care is, without a doubt, that of training of administrative personnel, and especially

the managerial and accounting officials, in relation to the highly skilled and important duties which they are called upon to perform in the University System.

At the conclusion of the Civil Service competitions, and prior to their assignment to the various university centers, officials at the managerial level must attend a training course, as required for all winners of Civil Service appointments. This course consists of a series of theoretical conference-lectures, held by the Ministry officials who head the various offices in charge of overseeing the universities and co-ordinating activities in the university sector.

During the training course -- of five weeks' duration -- the various aspects of university administration are illustrated with special reference to practices in regard to careers of teaching and technical personnel at all levels, handling of university property, and administering the various forms of student aid and welfare (with particular emphasis on the norms and criteria for the payment of scholarships). Attention also is given to the norms regulating the organization of courses, course work and final examinations for degrees, and post-graduate specialization courses.

Particular emphasis is put upon the description and analysis of principles and criteria which govern a university's function in a modern, democratic state; and a critical-comparative discussion of international university systems also is favored in these courses.

Upon termination of these training courses, officials at the managerial level are sent to the various university centers where they are assigned to begin their internship duties. Then, confronted by their future managerial duties, they are presented with an array of first-hand experiences in the operation of various

university administrative offices. By assigning them, temporarily and successively, to several of the most important and delicate services in the university, they demonstrate their ability; and under the close guidance of the Administrative Director, these new officials gradually become acquainted with the administrative realities of every day operation.

From the registrar's office to the general affairs office, in a short period of time, they cover the entire series of offices that make up the university administration, with the understanding that ultimately they will be assigned to one specific service and, almost certainly, no longer concern themselves with the work of the other offices they have learned during their training period. Knowledge acquired will, however, be necessary, if not indispensable when, as they advance through the various stages of their careers, they may have to coordinate or manage the work of their own colleagues and staff members.

Accounting personnel are also followed with particular care at the time of their training inasmuch as they are called upon to manage those offices which handle the bookkeeping and movement of funds into and out of the university. A particular duty of these officials is that of annually compiling the budget of the institution (in the double form of estimate and actual expenditure), since universities enjoy administrative autonomy and, therefore, must deliberate and later justify expenses incurred, in accordance with the norms established by law, in the achievement of their institutional goals.

Our sharp increase in student population and the unrest which universities are presently experiencing, have logically rendered the role of higher education more complex and burdensome. Administrative personnel are, therefore, called upon to carry out work and duties which they can accomplish only if their training has been effected with seriousness and adequacy.

ACE Experimental Program *

Late in 1964, the American Council on Education, under a grant from the Ford Foundation, organized the Academic Administration Internship Program to assist colleges and universities in identifying and developing their potential talent for key positions in academic administration. Selecting 23 Fellows for the 1965-66 Class, the Council assigned them to host institutions for a year's internship and paid their salary and moving expenses. There were 39 ACE Fellows in 1966-67, and 44 in 1967-68.

In the fall of 1967, with most of the Ford Foundation grant no longer available, it was necessary to revise the program for 1968-69. President Logan Wilson in announcing the Fourth Class asked each ACE member institution to become a "Co-operating Institution" in the AAIP by financing its nominee either at a host institution or in an internship experience on the home campus. From the individuals nominated for 1968-69, the Council interviewed and selected 31 ACE Fellows, and in a new category, 18 ACE Interns. Again, in preparation for the fifth Class in 1969-70, the Council selected 32 Fellows and 19 Interns.

Beginning with 1970-71, the Council eliminated the Intern category and returned to the original plan of selecting ACE Fellows only. Not more than 40 Fellows were chosen from the nominees on the basis of dossier evaluations in December, 1969 and interviews during February, 1970. The Fellows attended week-long seminars in the fall and spring at Council expense, and experienced their internships either on a host campus or, freed of routine duties, on the home campus.

*On April 13, 1970, the Rectors' Program terminated with a visit to the Nation's Capital, where a planned program was scheduled at the American Council of Education Building at One Dupont Circle. The talk, delivered by Dr. Charles G. Dobbins, Executive Secretary of the Council and Director of the Internship Program, on the experimental program to train university administrators, proved to be of great interest to the Rectors. This is a condensation.

In retrospect, both institutional acceptance of the AAIP's experimental program and the advancement of individual participants have been encouraging. Well over half of the participants in the first four classes have made significant advances into positions of academic responsibility.

The program's purpose is to strengthen leadership in American higher education by enlarging the number and improving the quality of persons available for key positions in academic administration. Its objectives are to help institutions identify younger faculty and staff who have shown some promise for academic administration; to encourage these persons to make academic administration their professional career, and to prepare for it; to provide them opportunities for planned observation and experience in decision-making; and to learn more for higher education about identifying potential administrative talent and developing it.

Each person nominated as a Fellow should be a member of the faculty or staff whom the president considers to be an outstanding prospect. The preferred age for Fellows is between 30 and 40, though nominations of persons 28-45 will be considered. Because the program emphasis is on the development of academic officers, it is expected that Fellows will hold doctorates or generally recognized terminal professional degrees (e.g., LL.D., M.D., M.Arch.) and will have been members of a faculty for a minimum of two years. Persons without these two qualifications but with other outstanding qualifications indicative of high potential for successful careers as academic officers may be chosen. Fellows should have had some administrative experience or have demonstrated real potential in the broad field of administration. Administrative potential may be demonstrated by a faculty member's contribution as a committee member or as a leader in shaping faculty opinion or policy.

The Council invites member colleges and universities, through their presidents, to become "Cooperating Institutions" in the Academic Administration Internship Program on the following terms:

1. The president, using whatever selection procedure seems appropriate, is asked to nominate from his faculty or junior staff a qualified individual with promise of administrative ability. The president is asked to submit with the nomination a brief explanation of the method used in selecting the candidate, and to choose between the two internship options. Under both internship plans, the nominating institution agrees to pay the salary and any special expenses of its Fellow.
2. The Council after reviewing (1) the quality and promise of the candidates, and (2) the institutions' assurance of a satisfactory internship experience either on a host campus or on the home campus, selects in December the candidates to be interviewed in February.
3. In March, the Council will name from among those candidates interviewed not more than 40 American Council Fellows in Academic Administration. ACE Fellows will participate at Council expense in a fall seminar (University of Chicago) and in a spring seminar (Washington, D.C.) on the problems of academic administration, and become a part of the Council's continuing program of research in academic administration. Whether an institution offers a host campus or home campus internship will not be a consideration in the selection of Council Fellows.
4. It is expected (a) that each Fellow will undertake certain assigned reading in academic administration, both prior to and during the internship; (b) that each Fellow will serve his home institution for the academic year following the internship; and (c) that he will produce by April 1, an analytical report of some significance in the field of academic administration. Authors of articles rated best by a Council staff committee receives appropriate recognition and council consideration of their articles for publication.

5. The American Council provides each Cooperating Institution with a set of guidelines for structuring the internship experience. The AAIP staff is available for consultation at all times, visits as many Cooperating Institutions as may be practicable, and provides Fellows with a study program in academic administration. The Council also sends Fellows its bulletin Higher Education and National Affairs, the Educational Record, and some other principal publications.
6. Regional meetings of all Fellows and their mentors are held in November of the internship year for discussion of the internships and of selected issues in higher education.

For persons with qualifications for careers in academic administration, and for institutions that seek qualified administrators, the program affords unusual opportunities. Those selected as Fellows have the opportunity to broaden, deepen, and vary their experience by participating directly in academic administration. Typically each Fellow is assigned for varying periods to an academic dean, officers of the central administration, and the president, both to observe and to participate appropriately in the policy and decision-making activities of these offices. The institution is not committed to offer its Fellow an administrative position following his internship, though it is hoped that he may be considered for such a position if he qualifies and a position is available.

Both institutional acceptance of the AAIP's experimental program and the advancement of individual participants have been encouraging. As of November 1962 about three out of four participants in the first four classes had made significant advances into positions in academic administration. Twelve ACE Fellows had become presidents, and 22 had been named vice-presidents, vice-chancellors and provosts.

The Office of Research of the American Council on Education has conducted investigations of some aspects of the Academic Administration Internship Program since its inception. The comments here pertain to the first three years--1965-66, 1966-67, and 1967-68.

The research has focused on the characteristics of participating institutions, the characteristics of nominees (both those selected as interns and those not selected), the progress of nominees through the various stages of evaluation to the point of final selection as fellows, and the progress of fellows during the internship year and in the years immediately thereafter. Considerable attention has been given to the process of selection, including identification of background factors that were given the most weight in the review of dossiers and in the interviews.

The research results have been documented and made available to the academic community, and in addition the more important finds have been incorporated into operational decision-making. Lanier Cox, writing in the Spring 1966 issue of the Educational Record, described the objectives and initial operating structure of the program, and Alexander W. Astin, writing in the same issue, presented the initial research findings from the first year of the program. Results from the second year of the program were summarized by John A. Creager (ACE Research Reports, Vol. 1, No. 3, 1966). Soon to be published is an extensive summary of findings from the first three classes of fellows, which will include analyses of their performance during the internship year. These reports must be consulted for detailed supporting data, but some typical findings may be noted.

Characteristics of Participating Institutions

Although invitations to nominate candidates are directed to the presidents of

all member institutions of the American Council on Education (around 1,350), there has been a difference in level of participation in favor of public institutions and universities, with relatively less participation by liberal arts colleges, Protestant institutions, technical institutions, and two-year colleges. There is also a differential of participation by institutional size, with the highest rate of participation among the largest institutions.

Wherever useful and feasible, comparable screening information has been obtained from various "control" groups. For example, nominees have been compared with faculty members who report no interest in academic administration, and fellows have been compared with deans and other academic administrators who have already arrived in positions of academic leadership. Moreover, at each state of evaluation and selection, winners have been compared with nonwinners. And wherever possible, comparisons have been made across years of the Academic Administration Internship Program.

Although many nominees have come from the ranks of faculty, the nominee is much more likely to have had some administrative experience than is the typical faculty member. Nominees are also more likely than typical faculty to hold their highest degrees in the field of education. Psychological test data reveal that the nominee is more self-confident, out-going, and socially active than is the typical faculty member.

One interesting trend is that the more recent nominees appear to possess characteristics, aptitudes, and attitudes that come somewhat closer to those dossier items judged most important in evaluation and selection. This change in characteristics of the nominee group occurred primarily between the second and third year, at a time when program objectives and desired characteristics of nominees had become more clearly defined.

A finding of particular operational value is that the evaluation of the dossier has considerable validity as a preinterview screening device. Thus, the prescreening of candidates on the basis of dossier information considerably reduces the total number of interviews required to make final evaluations. It has been found consistently that winners of internships are more likely than nonwinners to hold the doctoral degree, to have higher salaries, to have a number of scholarly publications, and to show a stronger interest in academic (as opposed to nonacademic) administration.

A consistent picture of the similarity and differences between dossier and interview evaluations has emerged. Indeed, it is the similarity that permits the use of dossier evaluation as a prescreening device for the interview stage of evaluation. The differences, however, provide some justification for maintaining a two-stage evaluation procedure. The dossier evaluations emphasize past scholarly achievement as well as the ratings of the candidate by his home institution. The interview evaluations, on the other hand, emphasize intellectual skills as expressed in direct personal confrontation. In these days of campus turmoil, such skills may be even more critically important than in the past.

Research on the internship experience itself is based on postinternship data supplied by both interns and mentors. This information has yielded consistent results regardless of program year. According to reports by former fellows, the internship experience provides broadened professional contacts, enables the intern to learn new administrative techniques, gives him experience in new problem areas, and deepens his understanding of the interrelationships among administrative problems. Moreover, the internship experience facilitates the development of greater insight into national problems and their interface with higher education, development of a personal philosophy of higher education, and a more complete self-insight. Our

data indicate that these benefits of the internship experience are obtained primarily through the contacts and discussions with mentors, administrators, and faculty, and through opportunities to observe administrative operations. In addition to these benefits to the intern, there is evidence that the host institution also benefits through the staff studies and other services performed by the intern, who may often bring fresh perspectives on institutional problems.

Throughout the research program, the winners of internships have been compared with the nonwinners. In their interests and personality attributes, the winners show more similarities than do nonwinners to academic deans and vice-presidents, which in fact, many former interns become. Recently it has become possible to obtain career status data from those who held internships during the first three years of the program. This information provides a more discrete set of criteria for judging about the impact of the internship experience. Although this information is still being analyzed, some of the results may be briefly noted.

Approximately 75 percent of the former interns have become academic administrators, most often academic deans or vice-presidents, while only 25 percent of the nonwinners have done so. Among the winners, as compared to the nonwinners, there has been a greater increase in the levels of participation, time spent, and interest expressed in making decisions on academic policy. Former interns also report a higher percentage of activities such as lecturing, serving as a consultant, and publishing on academic or policy matters in higher education than do nonwinners.

Further analyses of these data are being made, including more specific studies of the relationships of the current career status of former candidates, both winners and nonwinners, to the evaluation and selection procedures. The results of this phase of the research in support of the Academic Administration Internship Program will be documented in forthcoming research reports.

OTHER STATISTICAL NOTES, 1965-69

1. The Candidates

567 candidates were nominated
 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

439 candidates were interviewed
 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

161 candidates were selected
 XXXXXXXXXX

155 persons completed internships
 XXXXXXXXXX

2. Positions held by Participants at Time of Selection

<u>Position</u>	<u>Number</u>
Full-time faculty	61
Part-time Faculty/administration	51
Full-time administration	43

3. Median Age of Fellows and Interns

<u>Year</u>	<u>Age</u>
1968-69	36
1967-68	36
1966-67	38
1965-66	37

4. Mentors

<u>Position</u>	<u>Number</u>
President/chancellor	77
Vice-president/provost	42
Dean	20
Secretary to university	2
Assistant to president	8
Associate vice-president/academic affairs	3
Director, special programs	3

VI. UNIVERSITY STRUCTURE AND FUNCTION

ITALY--FACOLTA', INSTITUTES, DEPARTMENTS AND EXTENSIONS*

The questions posed in this report are undoubtedly among the most delicate and complex of those that plague our University System. Facoltà, institutes and departments are in fact pivots around which the structure and function of instruction and research turn.

Up to the present, the Facoltà in Italy have played an important and dominant role, a role that is destined to diminish, if not disappear, in the foreseeable future. This judgment is made in light of the emerging role of departments, especially with respect to scientific research.

Presently, one of the more traditional causes for failure to change the structure of our universities is the antiquity of their organizational arrangements and the resistance to injecting new blood into the organization. Rigidity exists despite Gentile's methodological reforms of 1923 and supplemental innovations of 1935, 1936, and 1954, with the consequent creation of new Facoltà and Institutes, most of which operate in accordance within the provisions of the old Casati Law of 1859, preserved in the present Law on University Instruction.

Several attempts made to give concrete form to the popular desire for change have thus far not met with tangible results. This has been due in part to the empiricism, often revealed in the formulation stage of various plans, and to the failure of certain political leaders to use the proposals projected by various universities and a special investigating commission, but also in part to the lack of unwavering commitment that has characterized our political leadership in recent years with regard to higher education.

* This statement by Rector Gustavo Vignocchi on elements of university organization, gave impetus to lively discussions at all three campuses visited by the Rectors during Phase I of the project.

Government Bill No. 231h, having to do with modifications of university organization, * was prepared on the basis of the recommendations of a special investigating commission and the endorsement of several universities. This Bill (Art. 1 and ff.) called for the retention of the Facoltà as organs of deliberation and coordination of basic teaching activities, and for permitting the establishment within the Facoltà of associated institutes of a lesser nature. These institutes would be empowered to grant diplomas, the lowest level in the hierarchy of university-level titles of study: research doctorates, degrees, and diplomas.

The Bill, when introduced, became the immediate subject of debate. Amendments were proposed by various agencies, including the Standing Conference of University Rectors and the National Association of University Professors. These called for the abolition of the institutes and for the approval of departments, conceived (Art. 7) and provided for within the University Statutes as optional bodies for the coordination of activities among several institutes or individual chairs (even if belonging to different Facoltà), and among the several disciplines, directed toward the study of common sectors of scientific research. Under the act, the departments were also entrusted with the coordination of curriculums and study programs for research doctorates, as well as with consultative powers, vis à vis the Assembly of Professors of the various Facoltà, on questions concerning requests for chairs and even proposals for the transfer of professors.

In Bill No. 231h, the Department was also intended as an organ that was not to replace the traditional Assembly of Professors, but rather as a parallel body intended to supplement its functions in the area of scientific research and in the preparation of teaching personnel. At the same time, the Department would be open, with its instructional equipment and libraries, to students for

* Presented to Parliament by Minister of Public Education on May 4, 1965.

the benefit of their cultural preparation and the better orientation of their studies.

During the course of the Fourth Legislature, however, no concrete action was taken on Bill No. 2314; and, after the period of serious tension that developed in Italian Universities in following years, it was replaced by other bills of parliamentary or governmental origin: the Scaglia-Colombo Bill, for example, on urgent measures for the University System, was presented to the Senate of the Fifth Legislature, on September 27, 1968. The Sullo-Ferrari Aggradi Bill No. 612 for a reform of university organization was presented to the Senate on April 17, 1969; the Malagodi Bill was presented to the Chamber of Deputies on December 28, 1968; the Gronchi-Montale-Ruini Bill No. 408 was presented to the Senate on June 11, 1969.

The Sullo-Ferrari Aggradi Bill, whose text has been given wide publicity, has aroused considerable debate. It has not yet received any concrete action at the legislative level, and it seems unlikely to in the near future inasmuch as it calls for a more radical organization of departments. Under the Sullo-Ferrari Aggradi Bill, the organization of departments, which the Gui Bill left as optional and spontaneous, becomes compulsory. All subjects and Institutes must be brought together in departments, and no more than one department may be formed for any particular group of disciplines (art.6). Furthermore, a dead-line is set for the reorganization of all disciplines and all institutes in departments within one year's time. Consistent with these ideas, art. 2 of the Bill calls for the organization of the university exclusively on the basis of departments and Facoltà, breaking completely with the tradition of institutes based on one or more Chairs. This change, as we shall see farther on, does not seem justified nor, at least for the immediate future, practicable.

The compulsory nature of the creation of departments means that if the local university authorities (the Facoltà, the University Council, and the Rector)

fail to move, the Ministry of Public Education will step in, on advice from the National University Council. Under the new Bill, the range and goals of departmental activity have also become more inclusive and predominant with respect to the traditional competence of the Assemblies of Professors at the Facoltà level. Art. 6 of the Bill charges departments with organizing research and teaching in general within a group of disciplines characterized by common goals and scientific needs; and, for this purpose, gives them authority: a) to organize the research and teaching activity for research doctorate programs, establishing the relative study and work plans; and b) to organize teaching and research activities for undergraduates following courses of study within the various Facoltà, as well as for graduate students enrolled in the Schools of Specialization. The Departments are also made responsible for personnel matters, such as the recruitment of full professors and technical personnel and the appointment of associate professors; for promoting teaching and research activity, organization of the necessary division of labor; and for distributing scholarships and grants in the teaching and research fields.

Compared with the competence of the Departmental bodies, as set forth in the Sullo Bill, the powers left to the Assembly of Professors of the Facoltà, while theoretically stated in terms of the organization of undergraduate studies, are in reality very circumscribed, even from the didactic point of view.

Officially, the Facoltà deliberates the institution, modification, and elimination of courses of study and Schools of Specialization and approves study plans, etc. But, as we have already noted, in practice the actual organization of teaching activities, even for undergraduates and students in the Specialization Schools, is concentrated in the departments, which would thus come entirely to replace the traditional teaching responsibilities of the Facoltà. On this point, we might well advance certain reservations.

The idea of the "department" arose, maybe in part from the example in other countries, mainly from the desire to create a structure aimed primarily at scientific research and also an arrangement that could free certain individuals of the burden of heavy teaching loads-- a condition that has worsened with the liberalization of studies and with the indiscriminate access of the university for the vast majority of secondary school graduates. Thus, the proposal to entrust departments with the burden of teaching as well as a large part of the administrative duties formerly assigned to Facoltà would, in practice, do no more than recreate, if not worsen, the original defects of the system. Further, it would lead to the suffocation of the delicate and arduous scientific activities originally intended, since through a dispersion of materials and organizational controls and influx of student masses, the department would be unable to achieve its announced research goals.

In reality, it would seem wise, and this opinion is shared by authoritative currents of opinion* to limit departments primarily to scientific research and to the preparation of researchers. By so doing, but to insure that Departments are sufficiently homogeneous, they should be constituted on the basis of scientific affinities, concretely ascertained and recognized by those most directly concerned with various subjects and institutes and in relation to the characteristics and organization of scientific studies, which differ markedly from university-to-university. Moreover, their establishment should be optional and depend on the initiative of separate institutions. Naturally, decisions in this regard should not be left to individuals, but rather to the Facoltà and university authorities, with the involvement and advice of other components of the university community. In short, universities should be left broad autonomy in this matter and be given the opportunity for useful experimentation with various

* See observations of Deans of Law Schools of Italian Universities.

types of departmental organization, following guide lines to be proposed by the future National University Council, or, for the present, by the Higher Council of Education (Consiglio Superiore dell'istruzione).

With regard to common teaching activities (excluding those concerning the research doctorate programs), they should be organized and carried out not just at the level of abstract regulations - - by the interested Facoltà, which by tradition and by their structural, functional and environmental characteristics, seem to be most suited to the achievement of these goals. Naturally, close ties and exchange of means and services should exist between the Facoltà and departments, in the sense that undergraduate students be allowed to make use of department libraries, laboratories and institutes when they so need, to deepen some particular aspect of their studies; while the undergraduate program might offer an effective form of experimentation and teaching for graduate students and for research doctorates. This suggestion naturally presupposes the greatest freedom and elasticity in agreements between the Facoltà and departments for setting up, developing, and using, certain types of equipment, instruments and libraries.

Within the framework of the traditions and characteristics of our university organizations, it would also seem that responsibility for recruiting and appointing teaching personnel is best left in the hands of the Councils of Professors of the various Facoltà. This would prevent the basic decisions concerning the whole teaching staff from being concentrated in the hands of relatively small groups, as the departments actually are in the proposed Italian system, to the detriment of the need for unity.

The Councils of Professors of the Facoltà should, according to certain authoritative opinions, assume the role of coordinator of the departments and institutes (including those few one-Chair Institutes that may survive, at least temporarily) at an intermediate level between these bodies themselves

and the technical and administrative bodies at the general university level with responsibilities of a both deliberative and consultative nature. This could be effectively arranged in case the Councils of Professors differentiated internally according to courses of study.

We have already noted how the latest Sullo Bill unjustifiably neglects the institutes. The previous Gui Bill No. 2314 provided for the existence of institutes based on more than one chair (art. 6ff.), for the purpose of co-ordinating better teaching and scientific activities within the area of a group of identical or similar subjects.

In the Sullo Bill, the institutes have been completely absorbed into the department framework, which has become compulsory. Although this may find an explanation from the point of view of trends, it does not seem to be completely justified given the present state of affairs inasmuch as these institutes (whether they are based on one or more Chairs) can still play a useful role both within the larger framework of the department and, at least temporarily, in those cases where their incorporation into departments is not yet conveniently possible.

In such cases where their usefulness is recognized, institutes should be granted a certain organizational and administrative autonomy, as already authorized by article 53 of the present Law on university instruction, approved in 1933, entrusting discipline, within the confines of general university law, to the supplementary and spontaneous authority of the university itself.

One may observe that, the question of the associated institutes for professional training and the recognition of their respective diplomas, the Sullo Bill has removed the impressions that were justly directed at the earlier Gui Bill.

A dilemma persists with respect to the composition of various councils at the course of study, department and Facoltà levels, probably because the

Sullo Bill does not reflect sufficiently the principle that participation of all components of a university should occur in university government. Involvement, however, should mean a) keeping in mind the factors of responsibility such as maturity as well as technical and scientific experience; b) guaranteeing that elections of representatives, including student representatives, will take place in keeping with the principles of representation, c) taking care that with such participation in university government the autonomy of the university is guaranteed, by limiting intervention of outside persons within the confines of technical responsibilities and essential administrative representation and in carefully circumscribed percentages; and d) taking care that the qualitative and quantitative modalities of this participation are such as to ensure, and not compromise, the functionality of the organs of university government.

Extensions* (Sedi distaccate)

The Gui Bill No. 2314 states (art.2) that the establishment of new universities, Facoltà and state institutions, and the recognition of new free universities or institutions were to take place only by means of a Presidential Decree and then only on the basis of proposals by the Ministry of Public Education and the Ministry of the Treasury, which have been fully deliberated by the Council of Ministers on the basis of reports drawn up by the Minister of Public Education and which include opinions of the Higher Council on Education and the Committee of Ministers for National Economic Planning.

In reality, in recent years, the proliferation of universities, Facoltà and centers has been considerable, and in many cases this development has been empirical, subject to the influence of local interests. There has also been a sizeable increase in the establishment of extension Facoltà and courses of study in localities different from the university centers. Certain amendments to

* In Italy the term "extension" is used to describe Facoltà, institutes, schools of specialization, etc., belonging to a particular university; but, for reasons of convenience, have student distribution or physical-technical requirements, located in some other city than the university proper.

Bill 231h, proposed by the National Association of University Professors, called for explicit prohibition of these extensions; nor were these amendments completely unjustified, since such Facoltà and courses of study separated from the main university center often tended to grow erratically, cut off from the cultural and organizational context of their respective universities and, therefore, lacking in necessary didactic and scientific efficiency. More desirable, perhaps, would be the establishment of extension institutes of a specialized character in relation to particular environmental requirements of a technical and scientific nature, which may be important for the development of a particular branch of research or teaching. Such development has already taken place in various regions of Italy, including Emilia, with good results.

The most recent Sullo Bill, presented to the Senate in April, 1969, offers a fairly useful and rational line of planning and action with regard to the expansion and development of universities. Article 34 calls for presentation to Parliament by the government of a "Five-year Plan for University Development," based on the draft of the various universities and in connection with the presentation of the National Economic Plan. This Plan would be approved by law and put into effect through Presidential Decree, on advice from the Ministry of Public Education. The Plan would include, among other things, the establishment of new state universities, recognition of new free institutions, and appropriations for university building facilities; here again, priority would be given to institutions in those regions still without universities and in zones where student over-crowding exists. These new institutions would generally include Facoltà in the technical, scientific and humanistic fields. The blueprint would be on broad enough lines so as not to suppress completely the autonomy of decision of the various universities. These could continue to exist within the confines of opportune measures for general coordination and of controls, for example, over the actual availability of financial means, equipment, libraries and teaching

and administrative staff, so as to avoid extemporaneous initiatives and counter-act irresponsible local pressures.

To this end, the intervention of the university consultative bodies on the national level would seem a useful instrument and should be included within the panorama of future and final reform laws.

Conclusions

I think we may say that at this point in Italy we have a sufficient mass of data, experimentation and proposals to permit the passage of a reform law for the universities, which deals effectively with the questions developed in this report. Despite the fluidity and variety of opinions, proposals and even legislative bills of the most varied political origin, it is possible to find points of convergence around the basic aspects of this reform, sufficient to satisfy the aspirations and real needs of the various components of the university community.

What is still lacking and must be sought and found, if we want to maintain and perfect the efficiency of the University in Italy, is a clear and responsible will on the part of the political forces, both parliamentary and governmental, who, overcoming prejudices based on partisan competition and compromise, must untie the Gordian knots of the greatest, basic problems with an open spirit and daring.

Only in this way can the political forces in parliament and government render a service not only to the university but also to the entire country. This may be achieved only by preventing official Italian culture, so rich in traditions, from slowly degenerating on the level of compromises.

COMMENTARY

WEIGEND

This is the last day of the seminars scheduled at Rutgers. During your brief visit here, you have discussed many aspects of university control and academic life. You have heard Dr. Vignocchi's presentation on the organization and function of faculties in Italian Universities. Because he has introduced the term "institutes," I should hasten to state that we do not really know in the United States what the term means.

Here at Rutgers, we do not have a University Faculty in fact. If a crucial matter arises in which all instructional personnel are concerned, the various faculties of the several schools and colleges within the University may petition the President to call a meeting of the University Assembly in order to discuss the burning issue. But this is obviously not "a faculty" in the sense described by Dr. Vignocchi here today.

What we call a faculty is the teaching and research body of individuals in any school or college, ranging in rank from instructors through full professors. Each of our autonomous sub-divisions within the University has its own faculty; and each faculty determines the academic requirements, methods of faculty recruitment, appointment, and promotion, and course offerings. Of course, there are certain basic rules that apply to the University as a whole and each unit must comply with the University statutes, approved by the Board of Governors.

As a member of the faculty of Rutgers College, let me illustrate its function and policy. The faculty has jurisdiction over all academic matters; it sets requirements for admission; it establishes curricula and fixes requirements for degrees; it

adopts rules governing its own procedures; it recommends for promotion in rank and for degrees in course, and so on. All these duties and powers are subject to review by the University Senate and the Board of Governors.

QUESTION

In Italy, the role of the Council is well established. I am at a loss to know where does responsibility lie here for matters such as subjects assigned to professors to teach, or for faculty recruitment when vacancies occur?

WEIGEND

Perhaps, the main difference is in our use of departments. Generally, in American higher education, the department is that entity within a faculty that is responsible for a specific discipline such as mathematics, history, or geography. When a vacancy exists here, it is the department's responsibility to find a replacement and to recommend that individual for appointment.

QUESTION

Let us suppose that a vacancy occurs in the Chemistry Department. The vacancy calls for a full professor in organic chemistry. Would the judgment of Department members who are specialists but not in organic chemistry be a determining factor? If so, why are they competent to pass judgment?

WEIGEND

In the United States, both major functions--research and teaching--rest with the same professors; that is, we make no differentiation as you do in that our departments are mainly operating units within the larger body, the faculty. Furthermore, our teaching faculty is also the research faculty and has to be.

FAEOD

The Chairman today has brought to our attention the marked differences in terminology used here and in Italy.

Before the last century, and going back four or more centuries, the university courses in Europe were coordinated in the professional fields by practitioners and associations. They decided in large measure what was necessary to teach in order to produce a doctor or a lawyer. On completion of a program of studies, it was they who prepared and gave the examination for admission to practice.

Today, on the other hand, it is the Assembly of Professors who teach a given subject, who decide what is the course content, and who compose the examining board that makes the decision as to an applicant's competency. In the Faculty of Law, we have a wide variety of specialists who comprise the Faculta'. The Assembly of Professors has been serving mainly in a consultative capacity. So, this terminology, about which we have been hearing becomes confusing. For example, even though the term "department" is rather apolitical, as far as I am concerned, the word "autonomy" about which we have heard a great deal this week, can also be misunderstood in that it has meant in our culture the exercise of a sovereign power.

For me, the word "programming" is a big word. So, the new "National University Council" is a misnomer, too, inasmuch as we do not know yet how it should be composed, what are its functions, what are to be the limits of its powers, and how will it relate with the political parties, the parliament, and the government--all of which have become deeply involved with higher education in Italy. This last matter is important because the universities have not been able to defend their traditional responsibilities.

Perhaps, our making contacts with you folks here may help us to be better informed with regard to experiences. Thus, we may return better equipped to cope with political power within the structure and to guide us in wise decision-making as we move into new forms of control and administrative structure.

BISHOP

I should like to say a word on the question of autonomy. Let me begin with a statement about what we consider to be the absolute right of the teaching body.

A teaching body must have complete control of who is admitted as students; they must have complete control of the courses taught and the programs of study; and they must have complete freedom to evaluate students, and thus determine who will be graduated and who will leave without a diploma. In American universities, I believe, these are the three autonomies that a faculty should claim.

Every summer, I receive several inquiries from members of the State legislature or the Governor about some student who, generally, is not very successful and who, apparently, has made an appeal through political channels for an "investigation of his mistreatment." It has always been my sole responsibility to determine whether a student has been dealt with unfairly.

In a similar vein, the Dean of the College has asked the Budget Committee or the Faculty to advise with him which departments should lose certain teaching positions. Some departments might have heavier teaching loads than others; so, he was desirous of removing teachers from some departments or creating a new position in a department with heavy enrollments.

The response may interest you. The Budget Committee of the Faculty told him that he should make the decision. The Dean persisted; so, they finally gave him advice on five positions, methods of financing them, and budget revision necessary. While there is a provision for advice from the faculty, allotments are handled at Rutgers very largely by administrators, the deans, and the President.

It is fitting to remember that in the case of public universities monies are voted by the state. Thus, if we at Rutgers do a bad job or if I give many bad answers to state legislators who inquire about special interest cases presumably they may vote us less money the following year. But I think we shall continue to make the distinction that admission to college, program of study, and grades are the business of the teaching body, and that finances and resources are handled essentially by administrative personnel, boards of governors and the state.

COMMENT

We note that the governing of the University is very important here and that the State government gets into the picture also.

BISHOP

Only in the sense of voting on operating budget.

QUESTION

Will you define the term "department?"

BISHOP

For us, a department is a group of scholars teaching a discipline, for example, mathematics, a romance language, or chemistry. A college, on the other hand, is a group of departments. Normally, several departments make up a college, and a college grants degrees in course.

We have a College of Engineering with departments in electrical engineering, chemical engineering, mechanical engineering, civil engineering, and so forth. There are five or six departments in the college.

QUESTION

Excuse me, which degree is possible within that college? Only the bachelor's degree, or the master's, too?

BISHOP

Bachelor's degrees within the college. In the graduate school, students would acquire graduate degrees.

WEIGEND

Let me explain one other feature of Rutgers. The same faculty members, or most of them, also belong to the Graduate Faculty which is an umbrella-like organization of all colleges within the University for those who are declared eligible to teach courses leading to degrees offered by the Graduate School of Arts and Sciences.

QUESTION

Do students enrolled in the College of Agriculture obtain instruction in English, for example, in Rutgers College?

WEIGEND

Yes. Similarly, the student in mechanical engineering enrolls for courses in mechanical engineering in his department and will take other required courses in the sciences and in mathematics at Rutgers College. Then, when the student has completed his program in accordance with departmental regulations, his department certifies that he has met in full all prescribed requirements and recommends him for a degree.

BISHOP

The department is the custodian of the records of the student in mechanical engineering, for example. That department sees that he meets all requirements. Then, at the end of the school year, there is a faculty meeting and the department of mechanical engineering recommends him for a degree in mechanical engineering, but that recommendation is voted upon by all other departments in the School. So, you see, there is autonomy at the bachelor's degree level.

WEIGEND

I have wondered whether Dean Bishop would care to answer the last part of the first question, and that is the definition of an "institute"?

BISHOP

We have at Rutgers the "Institute of Microbiology," that provides essential research in its field. The primary purpose of the Institute is research. The faculty of the Institute may also offer courses through the Graduate School. A number of students come to the Institute as post-doctoral fellows.

BURKS

Let me give you another example. In political science, we have a department in each undergraduate college of the University. We also have a research institute called the Eagleton Institute, which does training also at the graduate level only.

QUESTION

Excuse me, but what is a "school"?

BISHOP

A school at Rutgers is the name given to faculty members teaching in a professional institution, for example, the Law School, the Graduate School of Education, the Graduate School of Social Service.

BURKS

You will find when you visit Columbia University soon that there is another kind of institute. Columbia boasts of inter-disciplinary institutes devoted to an area, at the graduate level. For example, the European Institute, Asian Institute, South Asian Institute, etc.

THE STRUCTURE AND FUNCTIONING OF A PRIVATE UNIVERSITY

Role of the Trustees and Internal Organization Structure*

Columbia University is a corporation chartered by the State of New York. It is the type of corporation, perhaps Mr. Dolan may correct me, that I believe is called a "corporation absolute," which distinguishes it from a membership corporation or a stock corporation. A corporation is controlled by a Board of Trustees, which is answerable to no one from a legal point of view except the public, as represented by the Attorney General of the State of New York. In a stock corporation, or membership corporation, the directors would be answerable to members or the stockholders. The Trustees at Columbia are the custodians of all of the wealth and assets possessed by the University and they are charged with using these assets for purposes of education only.

The original trustees were a group of people named in the Charter, granted by the State and empowered to select their own successors in perpetuity. Consequently, in the earlier years of the University's history Trustees served essentially for life, or until they were incapacitated and resigned and their successors were elected by the surviving Trustees. At a point, perhaps 50 years ago, I am not quite sure of the exact date, the Trustees provided a mechanism whereby six of the 24 Trustees would be selected by the alumni of the university to serve each for a term of six years. This is done in rotation so that every year one of these

*Dr. Ralph Halford, formerly Professor of Chemistry; later, the distinguished Dean of the School of Graduate Studies at Columbia; currently, Vice President for Special Projects, began the discussion with an explanation of the Board of Trustees--its role, membership and selection, terms of office, its relationships to other University bodies, and other related points. His presentation provoked many questions from the Rectors. This is a condensation.

elected Alumni Trustees has his term expire; and he is replaced by a newly elected member. In a number of instances, since that procedure was instituted, Alumni Trustees have been re-elected to the Board either during their term, or shortly after its expiration as life-time members.

Last year, with the provision for University Senate as a new instrumentality of University government, arrangements were made whereby another six of the Trustees henceforth will be selected in consultation with the University Senate, so that we would have presently provision for 12 life-time self-perpetuating Trustees selected entirely by the Board, provision for six Alumni Trustees and provision for six Trustees, elected by the Board for life terms, perhaps, but in consultation with the Senate. The Trustees are currently in the process of initiating a further reform under which all members of the Board will be elected to six-year terms and as presently contemplated, according to my understanding, service will be limited absolutely to two terms. The Trustees are charged, under the charter, with responsibility for all of the affairs of the University--educational, academic, as well as business and financial.

About 70 years ago, the Trustees initiated a reform in which they created a so-called University Council. That Council was replaced last year by the University Senate. The Senate has broader powers than the Council had formerly, but I am speaking historically for a moment to the first reform. By the creation of the Council, the Trustees relinquished all of the authority over the educational affairs of the University and turned these over entirely to the so-called University Council, which consisted of chief administrators like deans of faculties, the

President, and some of his designated staff and elected members from the faculties of the University. The procedure constitutionally, whereby the Trustees transferred this authority, was admirably simple. They adopted a statute, a constitutional provision within the University which we call a statute whereby they divested themselves of all initiative in regard to any change in educational affairs. Programs for degree requirements, requirements for admission, all matters of that kind could be effected in the University only upon recommendation of the University Council. The Trustees, of course, could not divest themselves of their ultimate responsibility under the charter and so they retained a veto power, formulated so that no change recommended by the University Council could take effect until it had been recommended to the Trustees at one meeting and laid over until the next following meeting. But there was no requirement for ratification by the Trustees. In practice, the Trustees usually have ratified all proposals for educational reform.

COMMENTARY

QUESTION

Is the University President a non-voting member of the Trustees; or does he sit as the Trustees' executive officer?

HALFORD

The President is customarily a Trustee. This is not a necessity under our charter and rules, but it is custom. When the president is selected, he is elected to be a member of the Board. Yes, with a vote, he is a full member.

I was going to point out that customarily the president is the sole avenue of formal communication between the Trustees on the one side, and the rest of the University on the other. All matters to be presented by the University

Council, or other organs of the university, to the Trustees are communicated to the President, who presents them to the Trustees. Occasionally, proponents may be requested to appear to amplify the proposals and to explain, but they do not participate in the Trustee meeting and are excused before a decision is made. When the Trustees wish to communicate with organs of the University, they do so by way of the President. They speak to him, and then apart from their meeting, he meets with the faculties or whoever it might be. Now that is the formal situation. Actually, there is a good deal of informal acquaintanceship between members of the Board of Trustees and members of the University, which often results in private conversation on social occasions or at other times.

QUESTION

Is the vice-president a member of the Board of Trustees?

HALFORD

No, we have at the moment, six vice-presidents, one of whom is the statutory successor to the President in the event of emergency; or he is the alternate in the case the President cannot act. This is not myself; it is Dr. Rosenthal. He is called the vice--president and dean of faculties. The other vice-presidents (there is one for finance, one for business affairs, one for alumni affairs and development--no, we don't have one for research at the moment) are charged with particular administrative duties in limited areas. My own position is one that was created by Dr. Cordier and I can only describe it to you as something, I suppose, like a cabinet minister without portfolio. No one reports regularly to me, I simply try to be an extension of the President's presence wherever he assigns me to be from hour-to-hour and day-to-day. In fact,

on one occasion, he described my duties to a visitor at the University by introducing me and saying, "This is the Vice President for ~~the~~ Special Projects." and the visitor looked a little surprised. The President said "I am his special project."

Vice presidencies have to be created with the permission of the Trustees in each instance; but, if the President has a mission to be performed and can convince the Trustees this is the best way to perform it, then the appointment is made.

QUESTION

Will you please speak further about the educational organization of Columbia University?

HALFORD

The educational organization of the University is represented by a number of faculties in this University. A faculty is a group of persons, teaching personnel, with but a few exceptions, who make the educational policy with respect to a particular degree. For example, the undergraduate program for men is conducted by the Faculty of Columbia College, and the requirements for the A.B. Degree are set by that faculty. The programs leading to several different degrees in engineering are conducted by the Faculty of Engineering; and again, the requirements for each degree are established by that faculty, and so on. Each faculty has an exclusive jurisdiction over the educational program leading to one or more degrees. In general, it is supposed to be an inviolable rule, and I hope it is.

No one can hold the title of full professor or associate professor, without being assigned to some faculty of the University. Persons in the lower teaching

ranks are not necessarily assigned to faculty membership. Some persons in the University are members of several faculties, perhaps because their teaching is in areas that are serviced to several degree programs. As a member of the Chemistry Department of the University, I served on the Columbia College Faculty, on the Engineering Faculty, and on the Graduate Faculty. The first two appointments have to do with my teaching of large undergraduate classes, which were attended by both undergraduates in Columbia College and in the School of Engineering, and the latter has to do with the supervision of Ph.D. candidates in the Graduate School.

The departments are organized around subject matter areas, like chemistry, or physics, or Italian, or East Asian Languages and Cultures. There are (apart from the medical school, which has a large number of departments; and apart from the Engineering School, which has perhaps six departments, like Civil Engineering, Electrical engineering, etc.) about 30 departments in the arts and sciences area of the University. Persons holding teaching appointments in the departments (like the example of myself that I described earlier) may serve with several different faculties. The departments are purely service organizations; they teach the courses. It is the faculties as organizations that decide which particular selection of courses will be required for a degree.

QUESTION

You have made no mention of the Law School. Does it have departments, too?

HALFORD

The Law School is only one department. Law, Business, Library Service, and Journalism are examples of professional schools at Columbia, where the faculty and department are one and the same thing.

In your visits to two public universities, you have probably heard about their organizational structure. I notice that there are undoubtedly differences between the types of university now in question. But I have also noticed that among other differences there is a common bond or element--a common denominator--between this University and the public institutions like Rutgers and Michigan. It is evident in the election of members to the Board of Trustees, which I have already described for Columbia.

QUESTION

Please explain whether the Alumni Trustees must be strictly from the alumni, or whether the Alumni Organization may designate distinguished persons from within the political, cultural, social or economic life of the nation who are not Columbia alumni. What are the mechanics of the election process?

HALFORD

I understand the question. It has been the practice to limit the candidates to persons who are duly alumni, who hold degrees from the University. This same restriction does not apply in the more recent reform, where six Trustees are selected in consultation with the Senate. I should have explained earlier that the charter of the University strictly prohibits any faculty member from being a Trustee. So, the Senate would have to look outside.

The mechanism, whereby Alumni Trustees are elected, is a rather complicated one. I do not hold a degree from Columbia myself, so I have never participated in this matter but it is a combination of a kind of direct balloting and proportional representation, involving different alumni constituents. All the holders of a particular degree, who have graduated from a particular faculty, are organized into an association. So, we have a Law Alumni Association, Business and Law Association, Columbia College Alumni Association, and so on. Each of these associations conducts some kind of balloting internally to produce a candidate, who may be from its own or from another association.

Then there is some kind of conclave or meeting of representatives of these organizations, who nominate and vote. Their votes have different weights, depending upon the size of their alumni constituents. As a result of this, judging from past results, a graduate of the Law School, who entered the Law School on graduation from Columbia College, has a very high chance of being nominated and elected, because he will receive the support of two of the larger alumni associations.

QUESTION

These nominations of alumni--are they made in person in New York--would give a higher participation to alumni living in this metropolitan area or are they made by mail, in which case there would be a much greater participation of alumni worldwide?

HALFORD

You are being very perceptive. As I say, I have not participated, but judging from results, the Alumni Trustees, whom I have met over the years, are almost exclusively persons from New York City. We have several Trustees who come quite faithfully. Mr. Gossart, for example, comes in from Detroit quite faithfully. He rarely ever misses a meeting. Mr. Sanderson is no longer with the Board, but he used to come in from Cleveland or somewhere in Ohio. He rarely missed a meeting.

QUESTION

I would like to know if there is a commission or a council of departments; and, if so, what are its functions? Further, if there is some sort of overall governing body of departments, does it have merely advisory powers?

HALFORD

No, the departments have been purely service organization.

QUESTION

Dr. Halford's response to the last question, if extended, may be of further interest. Specifically, is there some type of linking of the departments within a faculty other than through the apparatus of the total faculty or regular faculty meeting?

HALFORD

Yes, let me illustrate: The Graduate Faculty of Arts and Sciences, which the Doctor of Philosophy degree, has its member departments linked to some

degree through an elected Committee on Instruction; and each of the Faculties has such a Committee on Instruction. There are occasionally informal exchanges between these Committees on Instruction. I know of only one occasion in which all of these Committees of Instruction met as a group. The reason for their meeting together was that they were the only agencies on-campus that has been elected by voting members of the entire Faculty of the University, and that was immediately after the upheaval that occurred on-campus in 1963. They met to assist the President in his efforts to come to grips with the scheduling of classes and examinations during the weeks after the disorders on-campus. In some respects, this helped to pave the way for the creation of the University Senate, an issue to which Professor deBarry and Mr. Andrew Dolan may wish to address themselves this morning.

QUESTION

Before terminating this dialogue, I would like to know whether the University Council has its membership defined?

HALFORD

In partial answer, the University Council, which has been succeeded now by the Senate but which functioned for about 70 years had stated number of members elected to it from the several faculties.

QUESTION

How many

HALFORD

Stated numbers, either two or three. It varied from faculty to faculty.

QUESTION

Please clarify the number inasmuch as it is important to me.

HALFORD

The statutes prescribe the numbers of the University Council to consist of the President, certain administrative officers named by office, certain others to be selected at the discretion of the president from among his administrative staff, either two or three representatives of each faculty who are elected by members of the faculty.

QUESTION

When you say "the statute," do you mean the University Charter, or the statutes of the Board of Trustees?

HALFORD

The body to whom the Trustees, you may recall, transferred full authority over educational affairs at the time it was created.

Part of the difficulty in my describing structure stems from the fact that some of our faculties are also departments. For example, the Graduate School of Business is a faculty and the Dean of that faculty is simultaneously the chairman of the Department of Business. The School of Engineering is a faculty that is sub-divided into several departments. The Law School is a faculty and a department. The Medical School is a faculty with many departments. So, there can be changes, one to the other.

When we refer to a faculty that is also a department, and to a faculty that is broken up into separate sub-divisions called departments, there is bound to be some confusion. I was aware of this and tried to avoid it, but I think we had better be explicit. It is commonplace in this University to use the word "faculty" loosely. To describe a person who is a teacher or to speak collectively of all the teaching personnel of the University, we use the term "faculty." On the one hand, an individual may be a faculty member in any one of the departments of learning in the University and, on the other hand, a member of the University faculty, made up collectively of voting members from all the teachers of a school or college within the University.

Time is pressing and there is a much more to hear from others assembled here. Mr. deBary why don't you make a few remarks about the structure of the Senate, how it is constituted and what its major functions are?

DE PARY

I think the first thing to understand about the Senate is that it is meant to represent the different schools of the university and the different groups within the schools--faculty, that is tenured faculty, and so-called junior or non-tenured faculty, students, administrative staff, library, research staff, and alumni. The powers of the Senate have to do with matters of University-wide importance. The Senate does not have the power within an individual faculty, except insofar as they might draw up general legislation for the University, which applies equally to all schools.

The membership of the Senate is 101; and one is the President of the University. The 100 members are chosen from among the faculty, students, and staff of the schools. The tenured faculty have the largest delegation, 42. The students have the next-largest delegation; I believe the number is 22. The non-tenured faculty has the next largest; I think it is 14. The administration has 9 representatives, chosen by the President from among his staff of deans and vice presidents.

The Senate has an executive committee, which consists primarily of tenured faculty, administration, non-tenured faculty and students. In other words, there are seven tenured faculty members, and two from the administration made up by the administration in order to see that whatever action is taken is in conformity with the other policies adopted by the Senate. The range of agenda items includes faculty affairs, student affairs, external relations and research. The last is important because so much of the support, financial support for research, comes from outside the University. There are important policy questions in regard to what kind of research may be undertaken within the University and on what conditions the funds may be accepted from the government. Here the autonomy of the University is very

jealously guarded. For instance, the Senate has adopted a policy on the recommendation of this committee that no such research should be confidential nor secret and that all research sponsored by the University must be open.

There are lesser committees having to do with the libraries and alumni relations. I may have left out some that Dr. Halford has already mentioned.

This gives you some idea of the range of standing committees of the Senate, which have an assigned membership distributed among different groups, the faculty, students, administration, but varying somewhat, depending upon the nature of the matter being considered. For instance, the Faculty Affairs Committee consists solely of faculty; the Student Affairs Committee consists solely of students, and so on. Membership in all of the Standing Committees must have a majority who are members of the Senate, but there may be persons chosen from outside. Thus, it is evident that nobody controls the Senate. There are those who regret this, but this is the case.

QUESTION

Is the University President a member of the Senate?

DE BARY

The President of the University is the presiding officer of the Senate. He presides whenever the Senate is convened in session. The Executive Committee of the Senate is presided over by an elected member of the tenured faculty; this is I. The University President is simply another member of the Executive Committee. The vice-president also sits as a member of the Executive Committee.

There has been some discussion as to whether it is advisable for the President to serve as the presiding officer of the Senate. The objection being that he is also supposed to be the responsible leader of the administration. It is very difficult

for him to serve both as an impartial chairman and as somebody who actively represents the administration. There may be some further discussion of this point in the future. I understand that the incoming President is very conscious of the incompatibility of these two roles and that he, himself, may ask for some change in this respect. My own opinion on the body which created the Senate was that it is inadvisable for the President to serve in this role.

QUESTION

Did you say that the alumni are represented in the Senate? I don't know whether I understood right.

DE BARY

Yes, you are correct; there are two members of the Alumni in this 100-member Senate. The reason is that it seemed important that the Alumni have a voice in choosing Trustees. They can exert an influence in that way. It seemed important, too, that the Senate have direct communication with the Alumni and the Alumni with the Senate. So, we did not have to relate to the Alumni only through the Board of Trustees.

I think that the Alumni are unhappy about having only two members in the Senate. They point to the very large number of Alumni and how important it is for them to take an active role in the affairs of the University. There are many groups in the University that do not have a representation in proportion to their numbers. For example, the administrative staff, the library staff, and so forth, have a much smaller representation than do the faculty and the students. So, you might say that the committee which drew up the plan for the Senate made a very conscious choice of emphasizing the role of the faculty and students somewhat less than that of the administration, and only provided a representation for these other groups so that they would have a spokesman and could be heard. But, it is not representation in proportion to their numbers.

BERG

Professor de Bary has to leave in just a little while. Before he goes perhaps he can answer some of the questions that were posed during our coffee interlude. Perhaps he will address himself to the question raised whether the creation of the University Senate was a direct outgrowth of the student uprisings.

DE BARY - Well, the question asked me was whether our campus became more quiet since the establishment of the Senate?

I just want to make clear one thing in regard to the Senate. I do not and I think most of my colleagues do not regard it simply as a device for keeping peace on the campus. The persons who participated in the violent disruptions of 1968 were not aiming to reform the University or to create a body such as the Senate.

This is a movement that was generated quite independently of those violent actions--well, I won't say independently. I think the shock of that experience had something certainly to do with the effort. From my point of view, there was a need for such a consultative body, or a policy-making body long before those disruptions occurred; and I believe there will continue to be a need. Even if let's say, the radical or revolutionary elements subside, I think there will remain a need for this kind of body because there was inadequate consultation before.

Frankly if you know anything about the issues over which the rioting occurred, I believe, myself, that such things as the building of a new gymnasium in a park, beside Columbia, had the support of the University community at the time it was planned but this kind of support was not formalized and it was not organized when the crisis came. It was not apparent that there was any support for that project. So, it represented a distinct weakness in the, you might say, political

structure of the University. It exposed an actual weakness that existed here. I would not make the mistake of thinking that the effectiveness of the Senate is necessarily going to be judged in terms of how quiet or how peaceful the campus may be. That can be determined by quite other factors entirely. I would only hope that, in time, we can demonstrate that we are able to play a constructive role. I do not think we will be able to demonstrate that right away. We face so many difficulties just in getting properly organized ourselves. I do believe that in time the Senate will contribute very constructively to the life of the University.

QUESTION

Is it possible for us to obtain copies of the constitution and by-laws of your Senate?

DE BARY

We can provide you with copies of the statutes and by-laws governing the Senate, with copies of the Senate bulletins that report the major actions taken by the Senate so far, and also with a summation of the committee activities of the Senate. These may be obtained from the Senate office. I shall ask Mr. Berg to obtain sufficient copies for the group.

You also asked about results apart from specific legislation, the general reaction on the campus. I think it is too early to say, but I have a feeling that we shall not be able to say ever that the campus is perfectly happy with this arrangement.

When the Senate plan was adopted, every group was somewhat unhappy with it. I think the faculty members were not eager to join in such a body, and administration was not very optimistic. The students themselves were very skeptical, and I

think most of them still are. It is not really ideal from anybody's point of view. The question is whether everyone will be willing to make the effort to come to terms with each other, recognizing that no one or no one group is going to be fully satisfied with the results. We are all going to be more or less unhappy; but I think, nevertheless, it does not enable us to make any spectacular claim. It does involve a facing up to our responsibilities to each other. I think many of us have learned a great deal in the process. It has been a very important educational experience for all who have participated.

QUESTION

If student discontent becomes more vocal and if student violence flares anew, what alternatives do you foresee for Columbia?

DE BARY

I think many of us who are members of the faculty and who feel a commitment to scholarship, and to the independence of the University, the autonomy of the University is very important. We see it threatened from two directions; from revolutionary forces on the left; and if these cannot be properly contained or managed in some way, the possibility of some kind of repressive action from the right. Quite apart from whether there may be a political reaction from the right, if the University falls into such great difficulties that it cannot maintain itself on a private, independent basis, then it will become subject to state control, and dependent upon taxes for its financial support. Nobody can spend tax money without some accountability; therefore, the University would become accountable indirectly to the legislature and to the taxpayers. We would then be involved in very serious political problems of a kind that affect our state universities already.

I think the faculty, because of its commitment to scholarship and belief in the institution's autonomy, attach great importance to the autonomy of the University; but I am not sure that the same thing applies in quite the same sense to other groups in the University and particularly to the students. They do not necessarily see themselves as committed to scholarship. They may not go into academic careers. They think of their future more in terms of their role in society. To them, it is not that important whether the University retains its independence. If they see there are serious disorders in the rest of society, they feel that the University cannot expect to preserve its isolation and of sanctuary apart from the disorder of the society. The students tend to be more concerned with the general condition of society. If they are active and positive in their response to that challenge, they would see the University in a role of social leadership, not just as preserving scholarship as providing society with leadership.

Increasingly, the universities have been looked to for guidance in public policy and social policy. University professors are often consulted in Congress in Washington or their committees. I myself have testified and will have to again. We devote a great deal of our time to matters of this kind, but the student who is here on the campus feels that perhaps we should be more visible in leading the struggle for reform and in solving problems that they are conscious. My feeling is that although there is a limit as to what the University can do to solve these problems, it has to define its role fully, if it is to be of active.

We must realize that the students think of themselves as going out to become leaders in society. They have this sense of responsibility and we must help them to perform that role. I do not know to what extent the University Senate will contribute. Mr. Dolan may offer you his judgment. I should think that that would be a very important aspect of this effort. I do not see it just as something confined in its effect just to the University campus. I would hope in the process if we are able to do this effectively, we might have more responsible citizens coming from the University who would be able to exercise their role of leadership in society-at-large. That really should be our hope for having made some contribution to the society through the training, the education of the young, not only in specialized technical sense, or in the sense of acquiring a certain expertise in scholarship, but also in terms of some kind of preparation of a role of social and political leadership. I think our great difficulty in this country is that we do not have any clear conception of political leadership.

QUESTION

I would like to know whether the Executive Committee of the Senate has a majority of tenured professors in its membership and, if so, whether they are able to impose their will in matters of primary importance?

DE BARY

The tenured faculty are the largest group, but they are not a majority. As questions have actually been decided in the Senate, they have not been decided purely along lines of the tenured faculty against other groups. The tenured faculty are divided among themselves and I think so are the students and the non-tenured faculty. Even the administration, even though the administration members are chosen by the President, differ on these matters. They vote differently on most

questions. So, whatever the result is, it depends for its effectiveness on different forces or factors; it depends on the question at hand. If it is something that can be implemented by the administration, then to that extent the administration can carry out the will of the Senate; but there is a tendency on the part of some people in the Senate to make grand declarations, the implementation of which is very unclear. One cannot tell what the operative effect of such a declaration may be.

BERG - I think it would be appropriate at this point to give them Mr. Dolan. Thank you very much Mr. DeBary.

DOLAN - I would like to say how honored I am to appear before you. Being the only student who will appear before you, I regard the responsibility of representing some 20,000 students to be a particularly crushing one. I would like to talk principally about the political aspects of the Senate, how it came to be formed, and what the perceptions of the students and the more liberal tenured and non-tenured faculty are of the Senate's role, not only in the University but as a guardian of the public interest.

It is no secret, I suspect, that the University Senate was born in crisis. Columbia University prior to the seizure of the buildings in 1968, was not so much mis-governed as it was non-governed. The faculty, which represents a sizeable number in this University, I believe, had abdicated its responsibility to provide humane and relevant leadership to one of this country's most distinguished Universities prior to 1960. The reasons for this are reasonably clear. Perhaps the most common and most seldom articulated reason is that college teachers prefer not to have to confront value judgments of a political nature, but principally to engage in scholarship and teaching, and I regret, in that order. Further committee meetings, which are the principal vehicle for governing any institution of any

size, are time-consuming, irritating, and they tend to be time-consuming and irritating directly in proportion to the number of viewpoints which are presented.

So, having students, who were born in a different generation whose perceptions were framed principally by different events in different personalities and by an entirely different world situation, cannot help but add to the time-consuming and irritating nature of a decision-making process. For these reasons, I suspect the faculty before 1963 had thought or had at least worked under an abiding suspicion that it would be possible to refrain from University governance. Let me make clear, that the faculty, to its credit, was more than willing to participate in the governance of separate divisions, such as the Law School, or of whatever school the professor might be a member. The fact of the matter is that the articulate goals of the students in 1963 concerned not questions of the curriculum in the Engineering School, or School of Business, but rather questions of policy which are peculiar to the University as a totality.

The Senate, I think aims principally at two goals and I regard each to be entirely worthy. First, they hope to avoid crisis situations, the type which confronted the University in 1963 and the type which came about principally through an aggregation of issues. Through a year-to-year survey of the State of the University, the Senate hopes to rectify difficulties as they arise, rather than allow them to continue until they overwhelm men of good judgment. Second, and less dramatically, the Senate hopes to develop policies which will represent the thought of a number of disparate groups. The Senate will, if nothing else, have considered what the possible difficulties of formulating policy would be, to some of the fringe groups in the University of which the students are clearly

It is important to review the student mentality, and I do not know whether these things are peculiar only to American students but I think I can say with some certainty they do represent the American student. First, Kingman Brewster, who is the President of Yale University, has coined a phrase called "the compulsive students." A compulsive student is a student who attends school, undergraduate and graduate, not because he recognizes the intrinsic value of education, or because he necessarily wants to, but rather, because the norms of society command him to do so. As a consequence, the vast number of students in universities are not here by choice. Second, students are becoming dubious of the productivity and advisability of scholarship. Many students regard it as irrelevant. Essentially what they mean by irrelevant is that there is not a clear nexus between the products of such work and correcting the ills in America which cry out for solution. I think we can see an unhappy wedding of circumstance between faculty, who do not really want to govern, and students who want to do little else.

My own feelings about Columbia's Senate are that it will provide essentially two things which are necessary not only to Columbia but to higher education in America, and I suspect, around the world. First, it will be a mechanism for immediate reform and it will do something to the school which will reorder its priorities, so that the students do not merely become cogs in an American machine "capitalism," which is not regarded as humane. Second, it will provide for more humane accountability between the various factions, not only in the University, but around the entire country. Such notions I do not believe are radical.

There is a trend, for example, in public schools, at primary and secondary levels, toward what is called decentralization. This merely means that individual schools will be governed by the people in the immediate community. The United States Supreme Court has in a land mark decision called for the reallocation of seats in State legislatures on the basis of population, and not on the basis of artificial state-drawn lines. Third, the battle cry of students is "all power to the people." That term has been used in some unfortunate contexts and has been misused more than it has been used properly. Nonetheless it signifies a trend toward making government accountable to "all the people." Last, we would like to see the University engage only in research of a kind which is likely to advance the causes of human dignity and human happiness, to reject all research that is war-related, and to limit research which only goes toward staffing the dominant lifestyle in this country--corporate or business.

The second goal. I think, the Senate can achieve is a day-to-day administration of the University which will take cognizance of the aspirations and goals of the students who enter every year. These goals, although they are often achieved or attempted to be achieved in barbaric manner, nonetheless, express to me the highest aspirations of the human race.

So I believe, what will determine whether or not the Senate is a success at Columbia, or at any other university that should seek to implement it, is principally whether or not its faculty members have a strong will to change--that is, whether or not they are willing to become strong advocates of the oppressed people not only in the United States, but around the world. It is for these

reasons that I ran for the Senate and sought to be elected; and I believe most of my own actions over the course of the year have been aimed at achieving such goals, and they have been modestly successful.

So, perhaps more than anything what I would like to communicate to you distinguished gentlemen is that students and non-tenured faculty seek to change the University in quite drastic ways; getting away from time-honored notions to strong, courageous, advocates of the causes of social justice and dignity for all people, not only in America but around the world. This borders, I recognize, on the maudlin because it does not reflect sound political thinking, but it seems to me that American universities perhaps above all should be in the vanguard.

QUESTION

I would like Mr. Dolan to comment on the relationship between academia and the day-to-day work of professors and students and on the Board of Trustees who are insulated from the concerns of day-to-day academic life.

DOLAN

There is a term in the United States called "Absentee Landlord"--someone who controls an entity but is not a part of the entity and does not live with the decisions that he should make about that entity. I am ambivalent about that as a theory. I do believe, for example, that it would be helpful if people had some control over the University who are not a part of the University so that they might rise above the day-to-day drudgery, if you will, of university life. That is people who do not everyday engage in research, teach classes, and things like that--so that they might see the University in its broader context. The difficulty with that is selecting persons who might fulfill the role. It seems to me that the trustee system in the United States is least able to perform that valuable function, and that is principally a product of the times. In earlier days, when students en

masse aspired to the kinds of positions that trustees hold in American life, they were suited for that. But now, students not only want to become presidents of corporations, influential citizens in its very conventional sense, but regard those people as part of the problem.

QUESTION

All the students?

DOLAN

Not all the students, certainly not. We have to struggle, I think to find some one who might provide a community pressure on the University, but who is not in a position where he has an interest in seeing to it that the University provides people to staff his corporations and things of that kind. What we have hit upon, as a compromise, is responding to the de facto not de jure political leaders of oppressed people in the United States. Among them would be such organizations as the Black Panthers, people of that kind. We regard them as not the most articulate people to come up with a remedy, but certainly as the most articulate of the mentality that characterizes oppressed people.

So, my response is simply this: We as students and faculty, cannot really appreciate what it must be like to live in deprived circumstances. In order to respond to the needs of these people, we try to listen to them and their representatives, who most clearly express the frustrations in their mentality.

One of the difficulties in America has been the estrangement of the intellectual and the masses. This, I believe, is a self-inflicted wound. Intellectuals in this country have made no attempt to identify their interests with the middle class. All problems, which are spoken of in the most convincing form, deal with the extreme lower classes. So, the middle class suspects, and rightfully, I believe, that the intellectuals expect the remedies for the lower classes to be made at their expense. That is, that the intellectuals have, first, not identified which class should pay for the corrections--that is the upper class--and have played a

game, if you will, of pitting the "have nots" against the "haves." As a student I have an obligation to make myself agreeable to the middle class so that they might identify with me and in that way I might be persuasive. So, I have short hair, I dress nice (applause) and in that way they might listen to me not as their enemy or someone who looks with contempt upon the things they regard as important. Faculty members might also do this by speaking in common sense terms to the middle class, showing them that, while their life is good, it might be very much better if they were to join the forces of social change with the lower class. So, any complaints that we have that the government is being insensitive to the solutions we propose are, I believe, our own fault.

BERG - Mr. Ddan's last point is a helpful clue for your understanding some of the commitments of many of our young people, and some of us who are not so young. It is interesting to note that in our American history the document on which our government is based starts with the line, "We, the people, in order to form a more perfect union..." This illustrates, in some respects, I think, the idea that the founding fathers were not the captives of an ideology. Though students' criticisms are deeply felt, I think they are the products as well of an American heritage. During short 200 years that we have been a national society, our citizenry has voiced a very strong element of pragmatism. One of the indicators in Mr. Ddan's own comment was that if there is a problem, it is a problem of alliances not of dogmatic ideologies. As interesting as it would be to pursue this very interesting political discussion, I must remind our guests that they have other University faculty members waiting for them at the Faculty Club.

VII. UNIVERSITY AND SCIENTIFIC RESEARCH

Scientific Research in Italy*

For centuries in Europe, the university has been the natural seat of basic research, which has also found expression through academies and associations of scholars, almost always of university formation.

In the last century, the growth of industrial society has led to the foundation, alongside the university, of poli-technical institutes and schools of economics, agriculture, etc., which in Italy were subsequently absorbed into the university community as separate Facoltà (Schools.) These schools had an applied nature, their aim being the preparation of the technicians required by society.

The great prestige of the universities permitted them to retain basic research as their almost exclusive dominion. As a result, important discoveries were made even in small, poorly-equipped universities, thanks to the initiative of genial scientists.

But in this century, and particularly since World War II, the universities have not been able to fulfill this responsibility entirely on their own. The dimensions of research have increased enormously, and this has led to intervention by the governments for the purpose of planning and organizing research.

In the various European countries, agencies with varying degrees of autonomy have been created to deal with the problem of research. There is usually a consultative body (which decides general scientific policy), and the financial means are entrusted to one or more "funds" which administers their distribution. In Italy, a Ministry of Scientific Research was created a few

*This is the paper presented by Rector Alessandro Faedo, on March 20, 1970 in Seminar I.

years ago, while the agency charged with the organization of research and the distribution of funds, the National Council of Research (C.N.R., Consiglio Nazionale delle Ricerche) was one of the first to be established in Europe, about 35 years ago.

The tendency in many Italian university circles, among which is the Standing Conference of University Rectors, is to remove the University from the jurisdiction of the Ministry of Public Education and to place it under the Ministry of Scientific Research, (transformed into a Ministry of University Education and Research) which aims at returning the university to the center of policy-making in the field of basic research.

Particular technological research, such as that in the fields of atomic energy and space, etc., are in Italy and in other European countries organized by other agencies, connected with the National Council of Research, with the Ministry of Industry, and similar organizations at the European level.

All these agencies are founded on a wide-spread prejudice among politicians who deal with science, that is, the conviction that there is a fundamental difference between the nature of basic research and the nature of applied research.

It is not possible to make a sharp division between pure basic research and exclusively applied science. Therefore, decisions concerning over-all research policy are taken at levels and by bodies whose aims, given their original function (exclusively in the area of applied science, are naturally limited.

I think we can say that in all the European countries, and not only in Italy, we have an absurd situation in which the universities provide most of the experts for the National Council of Research and other agencies, but are excluded-- in their capacity as universities --from all decision-making concerning research at the National level.

In federal Germany, the Standing Conference of University Rectors

(W.D.R.K.) determines research policy in the absence of a Ministry of Public Education; but, even in this case, one cannot say that the universities as such have much to say in these matters. In order to carry on basic research, the universities are forced to seek research contracts with public or private organizations, through the initiative of their professors or institutes, if they are to conduct scientific activity.

There are certain sectors, for example in the moral, historical and juridical sciences (the "humanities"), in which the University retains an essential role in research; but, in the natural sciences, on which applied research is based, the universities must often be content with the crumbs, while the bulk of research increasingly leaves the campus. On the other hand, the sector left to the universities (the humanistic sciences) accounts for only 5 to 15 per cent (with variations from country to country) of the total cost of research.

This is an important field of university activity, particularly in those countries of Europe which do not have regimes founded on a dominant ideology; but, fortunately, the function of critical research in the historical and economic field is of essential importance.

Almost all the countries of Europe have known periods in which dominant ideologies (it makes no difference whether they be political or religious) have attempted to distort history, creating myths and falsehoods, followed by decadence and woe. For example, this is what happened in Italy, where the religious ideologies, culminating in Galileo's trial, suffocated the great cultural phenomenon that was the Italian Renaissance, and was contributory to a revived classical civilization under new forms that gave birth to modern science.

The attitude of politicians towards scientific research is conditioned by various factors of greater or lesser importance. In the countries of Eastern Europe; for example, we have seen even genetics distorted by political ideology,

with enormous damage to the economy and interrupting the flow of scholarly research for an entire generation.

There are ideal factors: great scientists represent almost a title of nobility for a country. There are also reasons of national prestige (as is now taking place in the space race between the U.S.A. and the U.S.S.R.). But what really counts are the economic motives and the political interests that investment in research will quickly pay off in economic and social progress.

All this is quite natural.

For the university, instead, research aimed at a better knowledge of the laws of the Universe and the Realm of the Spirit, regardless of all utilitarian criteria, is of great interest.

The polytechnical schools are, on the contrary, specifically interested in applied research, directed towards economically positive results, and their position is thus much more easily understood by the politicians. The fact that in Italy these schools are part of the university (in contrast to France, Switzerland, and Germany) should facilitate understanding between the university and political power in the field of research.

Among the factors that influence the politicians one should distinguish between ideal considerations and socio-economic motives. Many things lead one to think that the former have very little weight. A concrete example may be found in the abundance of financial means made available in every country for nuclear research, when it seemed that this would rapidly lead to energy at competitive prices, and to the rapid retreat by all these governments (observe the crisis of EURATOM) as soon as it was clear that much more time would be needed.

Nor is the attitude of the governments towards those sciences that aim at a better knowledge of man at all encouraging. In most cases, such research is considered solely from the didactic point of view, as a problem that only concerns education.

In the Anglo-Saxon countries, the word "Sciences" is reserved for the natural sciences alone, in contrast with the Latin and Germanic countries. Only recently, partly as a result of what is happening in the United States, has some consideration been given to certain environmental sciences, in an effort to save human society from air pollution and other ecological and environmental dangers.

These utilitarian goals have drawn attention to certain aspects of scientific research hitherto neglected or promoted by purely academic-university circles.

Here, we are again faced with the problem of choice between research for its own sake or for application, a problem already pointed out by Plato. In fact, Plato recognized that the peoples who had preceded the Greeks in the history of civilization had cultivated certain sciences: astronomy and geometry. Their aim had been utilitarian: to discover and define the passage of the seasons and night and day, to establish the boundaries of fields wiped out by the life-giving floods of the Nile. Science for science's sake, for love of truth, regardless of the possibilities of immediate use, was discovered by Greek civilization and re-discovered by the Italian Renaissance. Our modern technological society began from these premises.

What road might it have followed had it remained anchored to immediate usefulness? If Galileo had not turned his telescope to the sky (a telescope commissioned by the Republic of Venice for observation of enemy ships in battle), if he had not dared to understand the laws that govern the movement of the stars, we would not today have space research, research which has produced results unthinkable only a few years ago, and which has permitted American civilization to achieve a success among the highest in the history of human endeavors.

Undoubtedly, much of the blame for the situation of marginality in which the European universities find themselves in the field of scientific research also rests on the universities themselves, which have not up-dated their structures in preparation for such an important undertaking.

All the European universities, and the Italian universities in particular, are due to undergo major reforms in order to fulfill better their functions in teaching and professional preparation. This transformation must also comprehend the problem of scientific research, bringing basic research back into the domain of the university, inasmuch as research constantly needs the new blood of young people who can dedicate themselves with the enthusiasm of an age still free from utilitarian complexes.

The university as such must concur in the formulation of basic research policy, since this is the area to which its structure is most suited.

In Italy, alongside the universities, basic research is carried out by autonomous state agencies, such as the laboratories and national institutes of the National Council of Research. In these agencies there is a tendency towards a deleterious professionalization of research, with a lack of renewal of young researchers, which only the university can give. For young people, the university years are often the most fruitful from the point of view of new ideas. There are scientists who have entered the annals of scientific history by elaborating in their maturity the ideas and mental audacities of their youth. Basic research needs these people.

For this reason, there is extensive collaboration in Italy between the university and the National Council of Research, even if considerable confusion of ideas in the division of tasks remains. This confusion exists particularly at the top, in the definition of the duties of the National Council and those of the Ministry of Education, under whose jurisdiction the university falls.

We are convinced that the Ministry should finance basic scientific research in every university, giving each the possibility to create schools for researchers.

The task of the National Council of Research should instead be that of financing those more extensive research projects that involve several universities or several disciplines and require larger financial means.

On the other hand, the universities recognize that the National Council must also provide for and follow-up the work of other research sectors outside the university.

It is our scepticism about the capability of the mastodonic Ministry of Education to deal fully with this problem (whose solution requires planning by scientists, not by bureaucrats) that has convinced the Standing Conference of Italian University Rectors to fight for greater autonomy for the university, following the reform.

To this end, we feel it is necessary to remove the universities from the jurisdiction of the Ministry of Public Education and place them under the Ministry of Research or another autonomous agency.

In this re-organization of the universities to suit them better to their new tasks, we also see the only way to absorb student contestation, which, despite its excesses, must take credit for drawing the attention of the European countries to the social responsibilities of the present-day university.

COMMENTARY

TORREY

The brochure I have circulated explains the various programs of the National Science Foundation. Note the pages are numbered. On the third leaf, you will note a description of the Education Program that differs from the Research Program on the fifth leaf. This distinction is made purposely. Sometimes it is arbitrary. The Foundation decides the appropriate parts of the program, the total program, and where to put a particular project.

ROLLA

Can you give us a specific example?

TORREY

If I had studied the teaching of history at the secondary school level for the purpose of improving the program nationally, it could be listed under the National Endowment for the Humanities; or it could be listed under the U.S. Office of Education. It would not be listed under the Research Section of the National Endowment. On the other hand, a monograph on an Italian painter would be supported by the National Endowment for the Humanities as a research project.

FAEDO

May I go back to something Professor Ermini said awhile back? When Professor Ermini completed his statement, I thought about what he had said, naturally, and because it came from a person who has considerable knowledge and wide respect in the political environment and who has served with distinction as one-time Minister of Public Education in Italy. In the interim I have come to the conclusion I do not concur with his statement.

I am asking him, therefore, how does he establish a relationship with regard

to proper appropriations needed for research- academic and applied research? I maintain that the relationship is not just much less but deliberate. In short, every detail is provided in support of applied research in Italy and the reason is obvious, it is political.

The typical Italian researcher, with great difficulty, gets himself a project. It may be that by preparation or interest he is drawn by a selfish type of research. If so, this eliminates him from working with a team. Many Italian researchers have had no experience in the act of working together in this team work. It is a process they have to learn, but at the moment they do not have it.

Individual researchers also defend the investigator from political interference. The lone researcher is immune to political pressures. I am not sure whether or not I have interpreted our situation correctly, but I am surprised that others of my colleagues did not take issue with Professor Ermini's remarks. All of us here have from time to time expressed a form of dissent with respect to what he said. That is why I asked for the floor. I also wanted to clear for our American colleagues the notion we do not feel ourselves victims, at least not in the field of science.

Finally, I would like to add something more. Perhaps, there is not such a contrast between kinds of research as was indicated by Professor Ermini--that we use, very often, frameworks to indicated different things. I, as a mathematician, am not always sure because I am inclined, first, to give a definition and then proceed to concepts. The thing that is not different is what is pure research? What is applied research? From one sector within the university to a sector in another university, the definition of basic and applied research varies. For

example, I am a relative of a physicist. As a mathematician I understand what in physics is pure research. Then, I ask what is applied research? This becomes very difficult to answer.

In another field the situation is changed. The definition of pure research in the field of agriculture is quite different from that in experimental physics because the sciences have different boundaries. So, when we, for example, speak of a science, we call basic research that research which does not have utilitarian objectives, but has only the aim to arrive at truth.

In the School of Engineering what becomes pure research is that research which is directed at producing a particular kind of instrument, in an economic sense; it is not the kind of pure research that one finds in the School of Sciences.

So, when I speak of pure or applied research, I have a different concept in accordance with the discipline I am talking about, whether it be psychological or humanistic. Therefore, for me, the differences are stronger than the words may indicate.

TORREY

The argument about what is pure and what is applied research, of course, goes on here at Rutgers as elsewhere. Different researchers have different definitions on how to distinguish between them. It is easy to make a distinction when the research is clearly designed to encompass some utilitarian purpose. On the other hand, research may be designed strictly in accordance with the intellectual interests of the principal investigator. Even so, there is a vast field between pure and applied research, where there is overlap.

For example, at this University, there are scholars who are probing the frontiers in the same fields. One faculty member in the College of Engineering may be doing research on the properties of materials in hope of discovering some property that may become useful. That is his motivation. Someone else in the Physics Department may also be studying the properties of materials in hope of understanding

the workings of nature of those materials. I would assume, in the latter case, that if he did uncover something that proved useful he would inform his colleague in Engineering about his findings. Then, perhaps, the engineers would endeavor to see what useful applications might be made. Thus, one can see, there is a possibility that some cooperation may develop among researchers with quite different motivations.

Thus far, we have made no mention about the vast amount of research that is going on in this area under the auspices of private industrial corporations. I do not know whether our guests are interested or not how this kind of research is related to University research?

Well, first, I should mention that there are many Federally sponsored research laboratories such as Brook Haven National Laboratory, Argonne Laboratory, Oak Ridge, etc.--you know about these I am sure. It is important to note, however, that these laboratories are operated by university consortia--an extension of universities' research activities off-campus. Most of the projects are in the field of physics.

In the National Institutes of Health within the U.S. Department of Health, Education and Welfare; there are major research efforts being mounted, and in the government laboratories such as the National Bureau of Standards, by persons in the direct employ of the Federal government rather than by the universities. Furthermore, our private industrial corporations have their own research programs. You may already have been alerted to what we call "Research Alley" extending from Philadelphia through New Jersey to New York. In this corridor many of the nation's largest firms maintain their research centers, naturally in support of their own interests. In these corporate-owned laboratories, scientists carry on a certain

amount of basic as well as applied research. They have learned that they cannot restrict themselves solely to applied research, so they probe new developments, new concepts and ideas in order to generate new applications. Of course, they also engage in some pure research. This is particularly true at several Bell Telephone Laboratories in New Jersey, where there are scientists of rare ability.

Here at Rutgers, we have an accelerator, where the Bell Telephone researchers are working with us on very basic research that is not at all in an applied field.

The research in which the corporations engage is, of course, conducted with their own funds. They get no support from the Federal government, except that they may take on certain kinds of obligations; such as the development of particular devices on the perfection of an operation of interest to the Federal Government, especially for the Department of Defense. For many years, the Department of Defense has maintained these kinds of relationships and funds projects at some of our important corporations.

Here at the University, there has developed a feeling on the part of some people against our accepting any financial support from the Department of Defense, no matter what the project may be. I think this attitude has been engendered largely because of the unpopularity of the Vietnam War. As a matter of fact, although we at Rutgers receive a sizeable amount of money each year from the Department of Defense, about \$1 million annually, none of the funding goes toward development of military devices or operations. In other words, our efforts are not oriented toward specific military application or even in general support of the military mission.

PART II
ACADEMIC PROBLEMS

I. ORGANIZATION OF CURRICULUMS IN HUMANISTIC FIELDS

HUMANITIES COURSES IN ITALY*

The courses of study leading to degrees in the humanities are many. They are organized within the various Facoltà (Schools), each of which offers one or more possible curriculums to its students.

Obviously, we cannot list them all here. I shall mention only a few, in order to point out a particular and quite important phenomenon, of which I shall have more to say later.

In Italy, we have eight types of humanistic Facoltà or Schools: Schools of Law (twenty-seven in number, including the free universities), Schools of Political Science (eleven in number), Schools of Economics and Commerce (twenty-four), Schools of Statistical, Demographic and Actuarial Sciences (two), Schools of Economic and Banking Sciences (one), Schools of Letters and Philosophy (twenty-three), Schools of Education, including the separate Teachers Colleges (twenty-one), Schools of Foreign Languages and Literature (five).

According to the national laws governing University instruction, the Schools or Facoltà of Law can offer a degree in political science, as well as degrees in law; naturally, this degree is also offered by the Facoltà of Political Science. In turn, the School of Political Science can also organize curriculums in Economics and Commerce (although at the moment none do in practice), curriculums that are primarily offered by the Facoltà of Economics and Commerce.

In this regard, we can say that the various Facoltà are connected by means of common courses of study: thus, the Facoltà of Economics and Commerce is connected, as well as to the Facoltà of Political Science through common

* This paper by Rector Tito Carnacini was presented at each of the University centers during the periods scheduled for a discussion on the place of the humanities in American higher education.

courses of study in economics, to the Facoltà of Statistical, Demographic and Actuarial Sciences by means of common courses of study in Statistics and Demographics and Economics. It is further connected to the Facoltà of Economics and Banking and to the Facoltà of Education, by means of common courses of study in foreign languages and literature.

We could mention other examples, however, we should immediately point out one fact: almost never do we have two identical courses of study belonging to two different Facoltà within the same university; one exception is the course of study in foreign languages and literature offered at the free Bocconi University in Milan by both the Facoltà of Foreign Languages and Literature, and by the Facoltà of Economics and Commerce (for the last two years, however, enrollment in the first year has been suspended for financial reasons).

The phenomenon of humanistic courses of study common to more than one Facoltà is interesting and would be worth examining in greater depth, not so much with regard to its causes, which can easily be identified, as with regard to its effects, which can easily be identified, as with regard to its effects, particularly in view of the proposed reform of our university structure. It occurs much more rarely in the scientific Facoltà; a special investigation in this sense, revealed only two cases of courses of study common to two Facoltà.

The courses of study leading to degrees in the humanities, all of four years duration, and some with the possibility of more than one major (for example, a degree in Letters with majors either classical or modern), are organized into basic courses and elective courses. The basic courses are obligatory and are pre-determined for each year by the Council of Professors (Consiglio di Facoltà) of each Facoltà; the elective subjects can be chosen by the students from a list made up by the same Council. In actual fact, the basic courses are those established, for each degree, by law (Royal Decree n. 1652 of October 30, 1938) and successive modifications of the University teaching

regulations; for the Facoltà of Political Science, a new regulation was instituted by Presidential Decree n. 1189 of October 31, 1968). These legal dispositions are incorporated into the Statutes of the individual universities and the Councils of Professors do no more than distribute these courses among the various years of the student's curriculum. The same procedure holds for the elective courses: the Councils decide the number of electives that must be followed in each year and make up lists of these courses, on the basis of the general lists relative to each degree, included in the 1938 Decree and following dispositions, and in some cases advising students in favor of certain subject rather than others.

The Statutes of the individual universities also establish the so-called "prerequisite courses"; that is, they establish that in order to attend certain courses or take certain examinations, the student must already have attended other courses or passed other examinations, setting the order of each. Thus, for example, a student in the Facoltà of Law cannot take the examination in Civil Law, Business Law, or Canonical Law before he has passed his examination in Institutions of Private Law; and, in the Facoltà of Economics and Commerce, he cannot take the first year examination in statistics until he has passed general mathematics or the examination in finance and financial law, until he has passed the first and second year examinations in economics, etc.

In general, courses are of one year's duration, with an examination at the end of the year; there are, however, also courses lasting two or three years, some with examinations only at the end of the entire two or three year period and others requiring examinations at the end of each year. For those two- or three-year courses with yearly examinations, a passing grade at the end of the year is a prerequisite for going on to the next part of the same course.

The examination for individual courses (esame di profitto) is taken before a commission of three members appointed by the Dean of the Facoltà and is generally oral. The commission must ascertain the intellectual maturity of the student and his over-all preparation in the subject matter with which the examination deals. For some subjects (for example, for Latin in the letters curriculums of the Facoltà of Letters and Philosophy), there is also a written examination that must be passed before the student may take his oral.

To be admitted to the final examination for the degree (esame di laurea), the student must have completed his curriculum, that is, he must have attended and passed his examinations in all the basic courses and the required number of elective courses. The final examination for the degree generally consists of a discussion of a written thesis on a subject approved by the official professor in that field. For some degrees, a discussion of one or more short oral theses, on subjects different from that of the written thesis, is also required.

Both examinations for course work and final examinations for degrees are held in two sessions: the first begins immediately after the end of courses annually and the second, a month before the beginning of the new academic year. During the year, in February, a special examination session is also held, as an extension of the two ordinary sessions.

With regard to the curriculums students must follow for degrees, an important innovation was recently made by Law n.910 of December 11, 1969: for the academic year 1969-1970, students are permitted to present, before February 28, 1970, a curriculum or plan of studies different from that established by the existing regulations, so long as these studies are included among the courses offered and in the required number. The student is, thus, no longer held to follow courses in the basic disciplines prescribed, or to follow them in a set order, or to choose his elective courses from among those established by the Council of Professors. He may, if he has so asked within the above-mentioned deadline,

February 28, 1970, substitute the prescribed basic and electives courses with other courses of his choice, even if offered in other Facoltà, without regard for the prerequisites set down by the University Statutes. Obviously, this freedom of choice is limited by the requirements of the student's own cultural formation and professional preparation. The law places the safeguarding of these requirements in the hands of the Council of Professors, which must examine and approve the proposed study plans; and, while the law has been very favorably received, The Councils cannot but consider certain basic courses, typical of the various courses of study, binding; nor can they ignore the necessity of certain prerequisites, without distorting the whole nature of the courses of study leading to degrees.

With the going into effect of Law 910 of December 11, 1969, graduates of all secondary schools with programs of five years' duration may enroll in any course of university study.

Prior to that date, access to certain courses of study in the humanities was limited to graduates of particular types of secondary institutions. Thus, to enroll in Letters, Philosophy, and Modern Foreign Languages and Literature in the Facoltà of Letters and Philosophy, the student was required to hold a diploma from the classical lyceum. Until 1962, the classical diploma was also required for entrance to the Facoltà of Law, in which year access was extended to graduates of the scientific lyceum as well.

Enrollment takes place at the first year of the course of studies; however, those who already hold another degree or a diploma granted by one of the university-level schools (such as the School of Statistics) may, under certain conditions, obtain enrollment in a higher year, through recognition of examinations passed in the course of their previous studies.

In concluding these remarks let me point out that the structure of courses of study in the humanities is not very different from those in the scientific fields, with the exception of the fact that an important place in

these latter is occupied by laboratory programs relative to certain technical disciplines. The division of the student's curriculum into two-year general prerequisite courses and three-year application periods found in some scientific courses of study is not an element of differentiation, since some humanistic curriculums-- for example, political science --have the same type of structure. A more clear-cut difference lies in the typically professional characterization of some of the scientific courses of study (for example, medicine and **e**ngineering); although, even here, we are basically dealing with a question of degree, since we cannot deny that certain humanistic courses of study also have a professional nature, for the most part leading to a variety of possible directions.

We cannot, therefore, establish any clear cut dividing line between the humanistic and scientific courses of study. We might even be tempted to deny any meaning to the difference as it has been presented: or are we to think that philosophy is not a science, and the historian or the jurist not a scientist, in the same way as the biologist?

PLACE OF THE HUMANITIES AND GENERAL EDUCATION AT COLUMBIA UNIVERSITY*

COMMENTARY

BERG

I have outlined briefly on this blackboard the various schools and colleges that comprise the University. As I explain this organizational chart, I shall use the term "Faculty" in many different meanings. I shall try to explain the different usages of the term as I proceed, and I shall also endeavor to have you comprehend our departmental structure.

All together (pointing to blackboard), these are the Columbia "Faculties." I could add some more, if space allowed. Here are the University President, the Vice Presidents, and the Dean of Faculties, each of whom you met at the President's House. The latter is the 1955 Nobel prize winner in Physics, and the chief academic officer of the University. I am his Associate Dean. What falls off his desk is on my desk--a very pragmatic division of labor. He is the Nobel Prize winner; I am the Nobel Prize loser.

Each of these Faculties (referring to chart)--faculties here meaning the schools which grant a degree--has a dean. Some of them you met personally yesterday while visiting the professional schools. Today, you will meet other deans who are more like Department Chairmen in your great European universities.

*Columbia participants in the dialogue included Associate Dean of Faculties Ivar Berg, Jr. who moderated the discussion; Dr. Polykarp Kusch, Vice President and Dean of Faculties; Dr. George K. Frankel, Dean of the Graduate School of Arts and Sciences; Dr. Carl F. Hovde, Dean of Columbia College; and Dr. Aaron W. Warner, Dean of the School of General Studies.

The Graduate School of Arts and Sciences contains three major divisions: 1) the Faculty of Pure Science, 2) the Faculty of Philosophy, and 3) the Faculty of Political Science. They are linked together through an Executive Committee that governs the requirements for academic degrees--the Doctor of Philosophy and Master of Arts. Each of these sub-faculties has Departments, namely, biology, physics, chemistry, etc. (Pure Science); languages, philosophy, etc. (Philosophy); and history, political science, government, political science, etc. (Political Science). These Departments meet together regularly with the Dean of the Graduate Faculty as moderator. He has a good deal more power on this campus in every sense of the word than the other Deans of Law, Medicine, etc. Professor Richard Robey is the Associate Dean, and Dean Frankel, present in our group today, is the Dean.

Perhaps the reason Dean Frankel has more power is the other Schools, like Medicine, that offer the Ph.D. degree in addition to the degree that justified their being a Faculty, must be supervised by the Dean of the Graduate Faculty. When the Dean of the School of Business, for example, grants a Ph.D. the degree is monitored by this Executive Committee of the Faculty of Arts and Sciences. Therefore, Dean Frankel has a good deal of influence on the work of these other units of the University. The second reason why he has considerable power is that all of the Faculties and Schools that grant the Ph.D. degree, at Columbia--business, philosophy, engineering, and medicine (which grants Ph.D.'s in addition to medical degrees) are permitted to appoint permanent members to their separate school faculties with tenure by themselves. The

Dean of the Graduate Faculty of Arts and Sciences sits as the representative of the University President in meetings of a Personnel Committee, consisting of five scholars (a Committee which he and I construct) to review credentials of all nominees for permanent appointments such as associate and full professors.

When the Dean of the Graduate School of Business desires to nominate a man from one of his groups(he does not have departments) he submits the name to us and I speak with Dean Frankel, in which case I represent Dr. Kusch, Vice President and Dean of Faculties. We construct a Committee of five tenured faculty members. The candidates' credentials are then reviewed by that Committee. Their decision is forwarded to Dr. Kusch, who would not normally contest the vote.

I do not recall that the vote of a so-called Ad Hoc Committee on Tenure has ever been contested by the Academic Vice President, by the University President, or by the Trustees, who formally announce the appointment and issue the contract. Thus, his involvement in the Ph.D. degree requirements of all the Faculties that grant the degree and his presence in the meetings of the Ad Hoc Committees on Tenure give him a significant role on-campus because we regard the Ph.D. degree as the highest of the degrees we award.

These Faculties (pointing to chart) of Pure Science, Philosophy, and Political Science are divided as I previously indicated into the Departments of Biology, Mathematics, Anthropology, Sociology, etc. The members of these Departments are very often simultaneously also members of parallel under-

graduate Departments in the programs leading to baccalaureate degrees. There are some other faculty members of Columbia University Faculties who only belong to one Department, but I would estimate that more than half of the tenured members of the Columbia Faculties have membership in the undergraduate as well as the graduate version of their educational offerings. The reason why that large a number have dual academic citizenship stems from the fact that our programs in graduate studies, in our undergraduate Columbia College, and in our adult undergraduate college, called the School of General Studies, are the largest portion of the University, so that academically they are a very potent source from which the style of the University derives its recognition.

We also have a School of International Affairs. It has a Dean, currently serving as President of the University--a position he has held since the disorders in 1968. His successor will take office on December 1: Dr. William McGill. Dr. Cordier will then resume the Deanship of the School of International Affairs. Dr. Cordier also has an Associate Dean and he has a borrowed Faculty.

Most of the members of the Faculty of the School of International Affairs are in reality members of the Faculty of Graduate Studies. Dr. Cordier raises money and he contributes to the budget of the Faculty of Graduate Studies, whose teaching time he buys; half one's pay check would be from Dean Frankel's budget and half from Dr. Cordier's. So, he is a lucky Dean--he has no faculty, only money. He does have the problem, however, that if he were desirous of

bringing to campus a professor of International Relations, say from the University of Rome, whose special interests are Southern Europe, he could attract such a scholar by paying him a lot of money in the brain drain. But, even if he were successful in attracting the professor, Dean Cordier would then have to "sell his candidate" to the appropriate Department in the Graduate Faculty of Arts and Sciences. On the other hand, if the professor has certain skills that are more appropriate for undergraduate instruction, the Dean would go over to Columbia College and try to work something out with Dean Hovde.

A lot of negotiations of this sort takes place. That is another reason why we have so many dual citizenships among our professors. The reason why I dwell on this kind of appointment is that it is both the source of one of American universities' strengths as well as a source of their great problems. We hear questions such as these frequently posed: "Whose man is he?" "Is he Dean Frankel's man or Dean Cordier's." Along more strategic issues, we hear: "Where are the man's loyalties?" If Dean Frankel says, "Yes, you may take a leave of absence in order to teach at Rector Faedo's university." The professor may counter, "What do you mean? How will I cover my courses?"

Another kind of problem that frequently develops stems from the amount of time in academic work in the classroom that a professor with dual citizenship will provide to his respective Deans. The professor goes to one Dean and says, "He gave (?) me off." Then, he goes to his other Dean and says, "He gave (?) me off." So, they play each other off against each other -- a little bit, but not too much. It is a problem.

It is also a problem of significance when our Deans seek to recruit distinguished prospects for membership in our intellectual community. The Dean of the School of Business, as you can see from this catalog, is not just running a program for future executives. It is an academic discipline of some considerable substance at Columbia. One of its advantages is that it covers many fields and makes it possible to have a Faculty that is not broken down--so that all of the members are of the same training and with the same degrees in sociology, economics, etc. This makes it possible for us to innovate. For example, most of the exciting work with the computer that goes on in Columbia, apart from the research interests of all these people, goes on in the School of Business. So, they are allowed to recruit professors of mathematics and statistics, who can teach these kinds of mathematics and statistics. But the Economics Department in the Graduate Faculty and its overlapping group the Economics Department in Columbia College, may want to use mathematics for the same purpose. The two Deans compete with each other in the labor market to bring the same professor.

Many of our Deans would like to have Dr. Faedo's distinguished young mathematician, Prof. So-and-So. We have our own internal brain drain, and that is a problem because each of the Faculties has to have its own pay scale and the Departments tend to have great differences with respect to their access to Uncle Sam's pot of gold. Dr. Kusch obviously has little trouble arranging for research funds to supplement the salaries of the young

physicists. He does not have too many competitors on-campus. But some of our economists have served in the White House on the Council of Economic Advisors. They have very good accesses after they leave Washington. Therefore, some of the Faculties are able to provide more attractive offers.

Each year, when we make the budget, we have to worry about the salaries of the Graduate Faculty and the salaries in the college whose teachers do not have the same opportunities as some of the members of the Faculties of our Professional Schools. It is sometimes easier for our Professional Schools to recruit distinguished men, whose accomplishments, reputations, and access bring money that can be used ultimately to reward other members of the faculty. So, we end up with what we in the field of labor relations would refer to as coercive comparison. It is perfectly possible for a more distinguished member of the College Faculty or Graduate School Faculty, especially outside pure sciences, to earn smaller salaries and have more difficulty obtaining research funds than our somewhat less distinguished faculty in our Professional Schools. It is hard to estimate how serious that problem is. I think it is getting less serious, as we have worked hard to reduce the differences in the last three years.

Now, in addition to the several schools, some of which contain Departments, we have Institutes. Institutes have the advantage that since they are not academic departments, granting a degree, they can be more liberal with their definition of the kinds of professional skills they need on their faculty. Just as the School of Business can have a great variety of scholars in economics,

sociology, history, political science, etc. so can the Research Ins. which can also mobilize itself more easily in the effort to secure grants and funds from the government, from private foundations, and sometimes from corporations. But they have one central difficulty and that is that unless a member of the Institute is also elected to membership in one of the departments, he cannot hold an academic title, nor can he achieve tenure in the University. That makes their recruiting in the Institute very difficult. It also means competition--competition between faculties, for example, our Business and Economics Departments. At the same time, the presence of the Institute, available to a member of the Faculty, creates another kind of dual citizenship. A Dean says, "Your teaching isn't very good," and the Faculty member says, "So what? I will get my pay from the Institute." The problem again is with multiple loyalties and the opportunity of playing administrators off against each other. Now, we don't have a great number of these instances, but we do have this problem.

We have an Institute for the Study of Human Reproduction. It was the only way we could obtain funds from the Ford and Rockefeller Foundations for fundamental research in Human Genetics. Human Genetics requires many disciplines so the research that is necessary for population problems could not very well be gotten in any of the standing academic departments or schools.

Once the Institute was founded, the Director had lots of money and wanted to bring in people to do the research. So, he went to the Dean of the Medical School and said, "I have this man, and this man and this man whom I would like to bring to the Institute. Would you hire them for the Medical Faculty?" The

Dean said, "I will look into it," and he talks to the people who are most closely involved in the Medical School Faculty with similar problems. They like one of the nominees, but they did not like the other two. The Director of the Institute accuses the Faculty of Medicine of being old fashioned, unproductive, tiresome, and obstructionist. Thus, it becomes a very serious type of problem.

As you well know, many of the problems which interest us in 1970 are problems that do in fact require multiple skills from a variety of disciplines. The mechanism for resolving them do not clear the problem. The closest solutions are in the Faculties that do not have any Departments and are free to hire multiple disciplinary representatives. I do not know that I can add very much...I hope I have explained without getting into the details of how many professors there are in a Department, enough of the structure of the University, so that you now have an adequate picture.

Looking at our academic apparatus, I am reminded of a story of three sports umpires, referees, like the ones you have in football. We have them in baseball. How difficult it is to give a name that describes all of this. These three umpires were discussing one day their philosophies of life. The first umpire said, "Some are balls; some are strikes; some balls come straight in; and some go way outside where the man has to hit the ball. I call them as they are! I am an objectivist." The second umpire said, "Some are balls; some are strikes and I call them as I see them. I am a subjectivist." The third umpire said, "No, no, no! Some are balls and some are strikes. But until I call them they are nothing. I am an existentialist." That is the way I feel about Columbia. Until one of us in Low Library, which is the building that houses the central administration,

calls it a "ball" or a "strike," there really is nothing one can put one's fingers on. Despite all the rules and all the statutes, the University is, as I am sure yours is, run to an extraordinary degree by custom, tradition, reasonably good manners, and with a great deal of hope.

QUESTION

I would not like to have to take an examination on the structure of Columbia University. I began to wonder why Columbia has not thought about creating at least one Department where students study the organization of the University (laughter).

Now, speaking seriously, I think I understand your description.

There is one point, however, that is not clear to me. It would appear that a professor can often carry on his professional activity in a Department in the Graduate Faculty as well as in a parallel Department in the undergraduate College. Does this mean that there are two Departments -- different Departments -- that have the same name? If so, in such case, a professor belongs in both Departments, or does he hold membership in one Department and works in two schools?

BERG

Your last sentence is probably the better description. For example, we have one Department of Economics. It has, I think, twenty members of the Faculty. Five of these teach almost exclusively in the Graduate Faculty of Arts and Sciences. Another five teach exclusively in the baccalaureate College. One or two teach exclusively in the adult college--The School of

General Studies. The others are in each of the Faculties -- Graduate College and General Studies. One of them is also a member of the Faculty of Business. One of them is also a member of the Department of Mathematics. One of them is also a member of the Faculty of the School of International Affairs, where he teaches Comparative Economics. Each school has its bulletin listing its Faculty and each professor's assigned subject discipline. This is done so that members of the Faculty who teach exclusively, let us say, in Columbia College will not be swallowed up by the Graduate Faculty. When this occurs, the Dean needs to make claim in the defense of needs of undergraduate education.

QUESTION

I would like to know whether in the history of Columbia University you have found the need for coordination among departments.

BERG

I would not pretend that we have satisfied the need to any satisfactory degree. You heard mention, made several times this week, of Committees on Instruction, which do facilitate a certain amount of coordination, much less, however, than one could wish for in the positions in which all of us occupy ourselves. It has often been said that American university faculties can agree very quickly the Dean should be hanged; but they have extraordinary difficulty in selecting the Dean. We also have heard earlier this week about our University Council, which has acted in some instances to coordinate, including such coordination problems as the academic calendar. But, the bulk

of the functions of that Council have been inherited either by the University Senate or specifically by one of its standing committees. but it is a relentless problem.

There is one other set of arrangements that occurs to me. Perhaps, you gentlemen, can address yourselves to it directly. Three of the gentlemen, on my right, the Dean of the School of General Studies, the Dean of the Graduate Faculties, Dean Frankel, meet regularly during the Fall and Winter. Through the mechanism of the budget, which will be submitted to their three schools, we manage a significant amount of coordination. Their discussions will be informational in that they are the many princes who represent the separate Departments. These are Medusa's three leopards. I will use the same line of that famous novel that I used the other day apropos of their discussions, "Everything has to change in order that they may stay the same."

BERG

These Deans, gentlemen, represent the heart of Columbia University. They clearly represent the intellectual substance of the University. The explanation I offered you earlier, I hope, served to underscore the strategic, intellectual role of these units of Columbia. They are the repository of our standards; they are hopefully the agents that attend to the most significant appointments of faculty made in the University; and they award the degrees that are most central to the purposes of Columbia University. I do not wish to imply by the segregation of Deans of the professional schools yesterday from these Deans of Faculties in the Arts and Sciences that the occasional tensions that one has to endure are so significant as to make the segregation indispensable. These groups do in fact meet often in the same room. In planning this occasion it was simply my judgment that the kinds of questions that one would wish to raise with yesterday's group and today's group would be substantially different kinds of questions. With that, I will ask Dean Hovde, please, to identify some of the issues that he sees in the general effort at Columbia in maintaining the arts and sciences programs much along the lines that were originally staked out in your great European institutions.

HOVDE

I should like to indicate a few of the problems which I think all of us see in the maintenance of intellectual work, at either the undergraduate or graduate level, though I speak primarily in the context of undergraduate instruction. Those studies, which grew out of different intellectual disciplines, which within the structure of the university are, of course, separated -- sometimes, we think, segregated for departmental organization.

The fundamental purpose in this country of a general liberal arts and sciences education is to provide the basis for the intelligent operation of an

essential society. This is a permanent need, obviously erased by what is happening in our elementary and secondary schools in this country. That is, their general improvement over what they were in the past.

There are, I think, a number of different problems which present themselves in the continuation of this inter-disciplinary and joint intellectual work. One of these comes from students who use the word relevance in a way that is now critical of the classical curriculum to which we have addressed ourselves. That is to say, to put this attitude as ignorantly as possible, why read Plato and Aristotle when there is air pollution in New York? There is a measure of truth in what students say, the more intelligent ones, in that obviously we should address ourselves in some fashion to modern problems, but it is an argument to be dismissed as absurd that the classics are any less relevant now than they have ever been. That is contemptible and is hardly worth intellectual discussion.

A more serious problem is the rapidly increasing drive and pressure in this country for earlier specialization within particular intellectual disciplines. More than 85 per cent of our students, who are graduated after four years from Columbia College in undergraduate work in one field or another, seek admission to graduate schools which are now asking for more and more preparation at the undergraduate level for work in their particular disciplines. Yet the need for general knowledge in the arts and sciences is still very clear. At this time, other pressures from the graduate schools are something which I think the undergraduate colleges in this country must resist, if they become excessive.

There is still another movement, often described as pressures from underneath, against the undergraduate work of the kind that I am talking about, and that is the greater level of sophistication and erudition with which students now enter undergraduate college. If one has read Plato when he is 15, why

should he be asked to read Plato again when he becomes 19? The answer to that question is, it is possible to read Plato 100 times and still learn from him. The argument, that the increasing quality of earlier education makes our kind of work unnecessary, is again to be dismissed. There is, I think, no reason to have undergraduates in this country rush through college in order to get into graduate school earlier. Our undergraduate work is not to be seen merely as a preparation for something else! It is an end in itself; it should be a preparation for mature intelligent thought.

How can we be responsive to the pressures upon our inter-disciplinary work? First, I think we are sometimes defensive, or, in a sense, take the stance that we are guilty because we are criticized. Sometimes, we should be; but, very often, I think we should not be defensive about the traditions of education which we have carried on. We must, of course, be convinced that what we have done is still worth doing, and we certainly must be willing continually to examine the intellectual viability of what it is we undertake. One of the difficult things, here at Columbia and and at other American institutions, is our departmental structure that academically, often and I think increasingly, militates against a cohesive and common intellectual address to our enterprise in general education. We have developed in the past structural mechanisms, such as the committees on Instruction, which exist solely to create the intellectual cooperation between departments - - doing things that relate one with another. I think it is increasingly true that the administration in our American colleges and universities must assert power and force - - much greater than they have been able to assert in the past. I think one of the pressures which must increasingly be brought to bear upon our departments is pressure through their budgets in order both to encourage and enforce the continuation and the growth in charge and in the work we undertake of this kind. But, of course, fundamental to everything is

the necessity that the faculty believe in this kind of enterprise because, if finally it does not, then no structures are going to make them do that work well.

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Would any others like to pick up any of the themes that Dean Hovde has commented on or like to discuss some of the administrative issues that grow out of his remarks?

WAGNER

I would like to say a few words about the School of General Studies, which is also a liberal arts college on-campus, and which is differentiated from Columbia College by reason of the fact that the students are older students. We have a student group 21 years old or older. Many of them work, at the same time or part-time. I think we are probably the only college in the country where students can work at school either in the daytime or nighttime. We are one of the few colleges which makes no distinctions between day and evening students, so that students who have to study in the evening can receive the same fine education that they would receive were they full daytime students. This is a very important attraction for motivated students from different parts of the country who wish a mature adult experience in education by means of earning their own living. It is a very interesting phenomenon that a very large percentage of our students go on to graduate and professional schools. In many cases, these people have had careers of one kind or another and now change their interests to more intellectual fields to satisfy a second career. However, the orientation of the school remains liberal arts in the sense that Dean Hovde has described it.

I would like to add to what Dean Hovde has said about standards - - about the problem of the constant effort that is required to maintain high standards of undergraduate education in this University, where graduate work is emphasized. Dean Hovde and I are constantly concerned that the faculty allocations and resources for undergraduate instruction be maintained at an adequate level, indeed distinguished level.

I would like to add to what Dean Howde said about the fact that there is no need to rush education. Although we still expect a student to spend four years acquiring his degree, we must at the same time take into account that most of our students are selected because they have had very superior preparation before coming; and, to the extent that secondary schools are able to improve their offerings, we in turn must pay careful attention to the challenge and stimulation which these very superior students receive in their undergraduate experience at Columbia University. This is a special challenge in a school for mature students who are not interested for the most part in student affairs. Older students tend to be concerned about the quality of the education for which they are paying and are not concerned about any distractions. Therefore, in our school, we have a particular challenge to see to it that faculty and offerings are stimulating and exciting as well as being intellectually valid. Thus, given the nature of our school and the fact that so many of our students come with diversified backgrounds, the range and diversity of offerings in general studies needs to be very great. For example, I would suppose that of all the schools in the country we offer more foreign languages to our students than they could get anywhere else, as well as a great variety of departmental offerings. Indeed we offer a very rich program. Again in this sense, I think we are a unique institution in that we concern ourselves with the education of older persons.

BERG

We now welcome Dr. Kurch, who has joined us for the time we have remaining to us. I have already introduced him to you so there is no need to delay discussion for those purposes. Dean Frankel, do you want to add comments on the topics which have been laid before the house or to discuss other aspects of liberal arts and general education at Columbia as you see them from where you sit?

FRANKEL

Although my own responsibility is for graduate education, mostly Ph.D. education, I think it would be inappropriate at this point to broaden the discussion away from the undergraduate level. So, I would like to make just one or two comments.

I am not personally familiar with the Italian educational system; but comparing our system with the British one, our college plays a very different role from the British university, where a student on entering the university already has specialized. Here, our students do not tend to specialize until the end of their undergraduate experience. I agree with Dean Howde that there are problems about trying to get inter-disciplinary work, when one has a departmental structure, but I think that, although structure can make considerable difference in how a university functions, the fundamental difficulty is with the nature of man's mind. I think that our knowledge has expanded so tremendously in this century, it is very difficult for an individual to cross disciplines in his teaching activities. I think a better measure of how much generality in education there is depends on the individual. Now, if our Professor of Art History or of the Italian Renaissance talks only about works of art and nothing about the Church or society at that time, then he would indeed be doing a narrow job of instruction. The student taking only Art History courses would still get a very broad education if his professor were a broadly educated man. I think a great deal of the quality of the education at the undergraduate or graduate level must depend both on the real brilliance and depth of perspective of the individual instructor. I think much depends upon the careful selection of the individual so that we will have the greatest strength and direction of the kind we have been talking about.

The only other comment I would make has to do with the problem of how rapidly a student should progress through college and through graduate work. We in this country, and I am sure this is probably true throughout Europe as well, are facing a younger generation which is much freer than our own generation -- much freer than we were at the comparable age in terms of all sorts of problems from sex to guns to the way they live. I am sometimes very worried that both at the undergraduate and graduate level our educational system is just prolonging adolescence. I do not know the answer to this, but I do think it is a serious problem. I also think if we go too far in the direction of underscoring general education, it will merely prolong adolescence too far, in terms of ill-defined general education.

QUESTION

We have noted in another university we visited that in order to be admitted at the post-graduate level, one must have a degree. It is the same here. So, I imagine that after receiving a degree, one could begin study in a post-graduate field.

Are there different periods of post-graduate study for different courses? Do they last a certain length of time?

FRANKEL

In the Ph.D. program or Master of Arts program, the minimum duration is probably three or four years for the Ph.D., after the baccalaureate. Many students take quite a bit longer than that. There is no uniform time period. The master's degree program takes one to two years after the bachelor's program. It takes two to three years and sometimes longer after the master's degree for the Ph.D. degree. There is no set time period to complete a certain amount of course work and the examination work preliminary to writing the dissertation for the Ph.D. The length of time it takes a particular student to meet the examinations requirement and to write the dissertation varies with the student. But our professional programs usually have a fixed time -- Law is three years after the bachelor's degree; Medicine is four; Master of Business Administration is two; and

QUESTION

Is there open admission to post-graduate study or are there limited openings in the different schools for graduate work? Are all candidates with a degree admitted to post-graduate study? Or do you have a definite number that may be accepted?

FRANKEL

Some of our professional schools have a fixed number of places--Law and Medicine, for example. In some Ph.D. programs at Columbia there is a maximum number they normally take, but with many others that is not so. We admit to the Ph.D. program maybe a quarter to a third of the persons who apply.

KUSCH

The interdisciplinary character of education at Columbia at the present time is markedly different among undergraduate and among graduate students. As an example, the Faculty of Columbia College -- the undergraduate division of our University with male students at the present time -- has considerable authority in setting up not only courses or in requiring the need for taking courses in different subject fields, but indeed in organizing courses which are by their nature inter-disciplinary to a substantial degree. In fact, it is one of the earmarks of Columbia College that the quality of work can properly be described as interdisciplinary. The interdisciplinary quality of education depends as much on the man teaching as it does on the technical arrangement for giving instruction. To my own knowledge, there are a considerable number of men in the University who teach in an interdisciplinary way in spite of the fact that they may be attached to relatively obscure departments.

By the same token, I also know of members of this Faculty who teach what I would call an academic or intellectual sub-speciality in spite of the fact that they are formally in an interdisciplinary program. I do not think I need to tell you this, but the nature of a man is as important as the institution which the man serves. It is, nevertheless, appropriate to comment that the College, the undergraduate college at this University -- I include both General Studies and the College -- do urge and foster such interdisciplinary approaches to education. The matter changes rapidly in the graduate school.

After all, one does award a degree for the mastery of a speciality, a scholarly speciality. This in no way should suggest that Departments are narrow. Let me tell you, as an example, that presently the Chairman of the Department of Biology, whatever you call it -- perhaps an Institute -- is in fact a Physicist of some distinction. The Chairman of our Department of Psychology is also a Physicist, of some substantial distinction. We are now engaged in that process in something that begins to acquire an interdisciplinary quality. The University recognizes that there may in fact be new molds of organizing knowledge. There are a number of established, what we call inter-departmental committees within the University, that take cognizance of several branches of knowledge. As an example, we have an Inter-Departmental Committee on Applied Mathematics. That is to say, instead of limiting itself to the rather formal mathematics of our Department of Mathematics, I give you Algebraic Topology. This is a concern of the Department of Mathematics. On the other hand, there are persons interested in Computer

Science, not as a technical problem, but as a major intellectual problem. There are these people who are trained not only in mathematics, but also in the various areas of the application of mathematics, notably physics or engineering. There are a large number, perhaps even an excessive number, of what one might call interdisciplinary committees; and these committees sponsor graduate work. They are largely administrative mechanisms for lubricating registration for a Ph.D. degree, part of which may occur in physics, mathematics, you name it. In addition, this University has a large number -- I express a personal administrative judgment -- an excessive number of institutes as distinct from Departments. These Institutes are dedicated to a certain general category of problems and try to attract people of varying disciplines. Let me give you one example: we have now in the University something called the International Institute for the Study of Human Reproduction, obviously dedicated to the solution of the social problem of expanding populations; but that group has within its domain sociologists, molecular biologists, and others.

Let me say not all of these enterprises enumerated work as well as they might. Part of the difficulty, which prevents them from working as well as they might, is that scholars are after all addicted to a large degree to a particular kind of delimited scholarly activity. And it is something of a problem to put together an interdisciplinary group, but we try in this direction as in others.

Another interdisciplinary institute is an Institute for the Study of Science and Human Affairs, that is, to examine critically and in a scholarly way the interaction between scientific and technological innovation on the one hand, and the, to put it very sloppily, the human condition on the other hand -- social organization -- economic problems. These opportunities do arise or are present in the University. If you were to ask me how it all works, I would have to confess that these formal arrangements do not really work very well no matter how good they look on paper. The fact is, if the student registers in the Department of Physics, of which I am a member, he is a dedicated disciple of the professors of the Department; and there is an apparatus, a style of accepting this man and training him, which is effective. If, however, he goes into something which is interdisciplinary, in a sense, he does not find an intellectual home anywhere. This does not have to be universally true, but I describe at least a tendency. These are the problems. We have not solved them.

ERMINI

This discourse is most interesting and a happy^{way} to end our dialogue. We have arrived at cultural values, that is, the theme -- what part is played by humanistic studies in education? I sustain what was stated by my colleagues, Professor Prini, namely, to insist on some concerns we have in Italy today. Humanistic studies have a capacity for understanding certain values of art and literature, and also have the capacity to understand the values relating to this period.

The capacity of living together with another man, and the ability of disciplining human action in such a manner that one does not infringe upon another's rights is the concept of humanism that we have had for centuries. Our free university education, until 18 years of age, is definitely encouraged to stress humanistic studies as I have described them. In Italy, we call our secondary school the lyceum. Many of us today are defending the role of the lyceum from an attack from a different culture, a technical culture, which we like considerably but not as a substitute for humanism.

Our Italian Mission here, represented by Professor Faedo, is composed of a mathematician, of lawyers, a philosopher, a physicist, a chemist and an administrator. I think that they have all had a general education of wide nature because at 18 years of age, we enter into University studies. We have learned that he/^{who} goes to the university without this lyceum preparation usually does not arrive at the point reached by those who have studied in the lyceum. Not even the sciences appear to be so far removed from humanistic studies, the so-called experimental sciences.

Now, the dangers that we are running into today are expressed politically in Italy. In other words, certain political sectors would attenuate the university environment, the tie between different sectors of knowledge, in the name of specialization, that in my opinion should follow a broad general formation, one that would arrive at this result by instituting departments. In my time, I actually proposed the institution of departments by abolishing the Facolta' so that there would be an organism which would eliminate the collaboration between the different departments, and so that there would be an

organism which would be a tie between the different sections of the university. This proposal was argued in the parliament personally by me, personally and by particular political parties, very clearly defined, not the ones which were on my right.

The other route, dangerous in my opinion, is to reduce the number of our universities -- to reduce the university to be a simple avenue of preparation for a specific function in the society. To do so would eliminate the general educational nature of culture which is what forms a man.

KUSCH

Perhaps one thing to be said of American education is that there is no one generalization which one can make. It is a pluralistic system of almost infinite range and the quality ranges from unqualified excellence to levels of absurdity which you probably do not suffer from in Europe. But it is true to say that the most distinguished intellectualism, the most distinguished institutions in this country are dedicated to a kind of humanistic development which, of course, is a great tradition of Italian and other European cultures. We have many schools in this country -- many of them quite old ones for us -- which give exclusive concentration upon narrowly defined skills, which make our technological society operate with some efficiency. But, from my point of view, the important institutions in this country are definitely dedicated to general cultural and humanistic values. I think many of us feel our technological culture has run away from, ahead of the kind of cultural and humanistic enterprise. For example, in this institution, I think general education is deeply rooted at the undergraduate level. But certainly not only there our values are the same.

As a physicist, who did not start life in one of our elite humanistic establishments as formerly defined, there is some implication in what has been said. Training in the sciences is training in skills, whereas training in other matters is basic education. I would like, if that were intended at any point, to register a protest. I put it this way to my good friend, Dean Frankel, that a particular scholar in English attempts to discern what went on in John Donne's mind when he wrote his poetry. On the other hand, the physicist, perhaps needs an historian to find out what went on in his mind when he wrote those masterpieces. As Newton. These are the concerns of the literary scholar and the historians. On the other hand, a perhaps elaborate way of saying it, a physicist, a chemist or a biologist, at his best, tries to discern what was in the mind of the Almighty, if you will allow me a piece of phraseology.

FRANKEL

It would never have occurred to me to eliminate science from a study of humanistic enterprise.

KUSCH

I might further make a remark about my views on the work of the professional. One may use the word "professional," describing the technicians of society. But one may also use the word "professional" to describe an extraordinarily high quality of work. Let me say that I refer to Professor Hofstadter, one of our distinguished historians, whom you may know as being a real professional, that is, a man who has acquired a body of knowledge, who is able to deal with it with intelligence, with skill. That is one definition of the word "specialization."

What does concern me about some styles of humanistic instruction is that it tends to be amorphous. One never really comes to grips with the disciplined mastery of a subject. One of the great compliments to me by a former student came on the occasion when I assumed my present post as Vice President of the University, instead of Professor of Physics. It was to thank me for courses he had taken from me. He described it this way: "He taught me to be a professional, and I do not mean a professional in physics." That I have taught him real professionalism, not only in physics, but professionalism in how one lives one's life. To this student it meant hard and difficult contact with a body of knowledge, the value of knowledge, the uses of knowledge and the difficult use of knowledge.

BERG

This is an excellent point on which to end our week of deliberation. Since I have already made my personal remarks and expressed my feelings and I am confident the feelings of the President of the University as well, I will simply say, "Thank you for being our guests."

May I remind you that in a very short time the President of Teachers College, President Fischer, will meet with you for a luncheon, when he will address himself to some of the kinds of questions with a more circumspect concern, with a transition of the ideals which Dr. Kusch has just identified into the day-to-day work of the Pentagon.

PLACE OF HUMANITIES AND GENERAL EDUCATION AT RUTGERS UNIVERSITY

COMMENTARY

PANE

In the humanistic studies, we in Rutgers College make an arbitrary division in that what we call the humanities there are none of the social sciences.

In our organizational arrangement last year, we had the following: 1) Humanities included the classics, art, literature (comparative as well as American), music, philosophy and religion, and 2) Social sciences included anthropology, Asian culture, economics, geography, history, political science, psychology, and sociology. 3) Science is a third division, which we call the natural sciences; it includes mathematics, astrology, biology, chemistry, geography, geology, and physics.

This structure is perhaps in sharp contrast with the Italian university, where the student takes a program leading to one degree upon the completion of his humanistic studies. Here we have a different system.

A child in the United States begins his schooling at age six. From six to 14 years of age, he attends elementary school, the middle school, and, then, he moves on to what we call the high or secondary school. The typical student terminates his studies at about 18 years of age, having completed the work of Grades 9, 10, 11 and 12.

If after high school the child is admitted to college, he attends four years in a program of studies which corresponds to the Lyceum in Italy. At college, he embarks upon a program during the first two years in general education and he may begin some slight specialization, if he is enrolled in a college of arts and sciences.

Within the last year or two, there has been a movement in American higher education to change everything. Universally, college students rebel against what we called regulations or requirements. As a result, we do not know yet which direction we are going. Major changes are contemplated.

The normal program at Rutgers College has been five courses a year for four years. Each academic year is divided into two semesters or terms. So, the average student takes 20 courses within his four year baccalaureate program.

The typical undergraduate here takes within his general education base, Freshman and Sophomore Years, a total of nine prescribed courses, spread as follows: English, one year; social sciences, two; humanities, two; natural sciences, two; and foreign languages, two. The remaining eleven courses are usually divided between one's field of specialization and course electives. A student's field of principal interest might, for example, be chemistry, English, physics or a foreign language. About half of the student's second two years would be dedicated to studying in his major field and the remainder in enrichment courses, called electives, which he would take on advice of his counselor. Then, on fulfillment of all requirements established by the faculty, he would be recommended to the President and the Board of Governors for a bachelor's degree. He would terminate his college work at age 21 or 22.

If a student is motivated to continue, he selects a graduate or professional school and applies for admission. If he wishes to become a lawyer, he would enter a law school, where he would in three more years acquire a law degree (quite generally today the Doctorate in Jurisprudence, but until recently the Bachelor of Laws degree). If he chooses to get a Ph.D. degree, he would go to a graduate school and do advanced study in a discipline. Because requirements for the degree are qualitative in nature, a student is expected to devote a minimum of three years of full-time study beyond the bachelor's degree, of which one year is used for thesis research. Part-time study usually takes five years or more time. The entire doctoral program must be completed within a period of seven years after the student first registers in the program. Thus, a typical student would acquire his Ph.D. at age 28 or 29.

ROLLA

What is the reason why graduate students in a humanistic field are expected to fulfill all Ph.D. requirements within six or seven years, whereas in the field of the sciences the student may be expected to finish in less? One would expect the reverse to be true.

LAM

At the University of Minnesota, a study was completed rather recently to determine how long it took to get a degree in the humanities and the social sciences. As Professor Pane was saying, seven years was the average. The chief cause cited was monetary reasons.

The graduate students in the sciences are required to work in the laboratories and they may earn their way as they go through. Doing research and writing a dissertation in the sciences, it seems to me, can be accomplished much more readily than in the humanities and social sciences since they usually extend over a much longer period of time. Would you all agree?

LAGGINI

Science majors usually receive full-tuition and they may, therefore, concentrate only on their subject matter. The humanistics student usually must divide his time between studies and teaching. In addition, students in the humanities require time before they can reach conclusions or what may be a valid contribution in the field and what is not. In a field, like English literature, for example, it is frequently a question of interpretation and that takes time, more discussion, and more examination than something more direct.

FAEDO

Our Italian situation is radically different. It all hinges on the fact that

preparation given by our Lyceums is essentially humanistic. When a student of ours reaches the university, for example, in the School of Letters, he has the possibility even while he is a student to arrive at valuable results that warrant publication. This has been particularly true in Pisa at the Scuola Normale Superiore, where students publish studies in Annals, magazines and reviews of great significance. Students in the sciences at the same institution, however, must learn a mass of information in his scientific field. So, normally they would not publish original works before they obtain their degrees.

Now, why is this situation the rule? My explanation is that students have a preparation in the humanities than in a scientific field. For example, a student who enters the university from the Classical Lyceum will have studied Latin eight years, Greek five years, as a base. We have had many, many students who have completed their studies in the Lyceum who can translate directly from Greek or Latin into the Italian language with great ease. On the other hand, the preparation in the scientific field is a rather different matter. Maybe this is because a greater emphasis is placed on scientific study so that matters are turned around.

Rather than try to fathom this particular question, I would prefer to address myself to our current efforts in Italy to reform in the Italian university bearing upon humanistic studies.

In Italy, our Schools of Humanistic Studies, Schools of Letters, and Schools of Education were focused traditionally in such a manner that they repeated the subject content of the Lyceums. This occurred, I presume, because the curriculum of the university for future teachers of letters found practically all the subject disciplines that are taught at the Lyceum level. For that reason there was a scarcity--a vacuum of depth in scientific studies and of critical research. They were engaged primarily in an effort to maintain themselves and to reinforce their programs in general studies.

In the university reform act, referred to earlier by Professor Carnacini, we have sought to preclude this condition of generalization in the humanities. If so, a student will be able to select a program of studies through which he will be able to eliminate many required subjects, that were at one time considered basic.

My concept of scientific research actually applies a study in depth in one or very few disciplines. By so doing, a student develops a scientific attitude. Not until he has acquired this attribute may he teach in that particular field. Yes, even though he does not have a broad base of general education, he may write at a scholarly level. I hope that this may be a positive result of university reform.

Finally, one comment as it pertains to the curriculum for preparing a teacher.

We are one of the countries where there is still a super-abundance of teachers. Our reservoir of teacher personnel stems from the fact that our schools graduate annually a mounting supply of people seeking to be teachers but who are not prepared specifically in learning theory or as classroom practitioners. As a result, we have the problem of severe competition for each vacancy in the public schools. The question is how do we contact valid selection procedures?

Actually, the current legislation requires competitive examinations and the tests are intended to determine how much the candidates know about a subject--pure textbook knowledge. The examinations are not geared to determine the teaching ability of those who apply.

Within the period of our visitations in the United States, I hope we can address ourselves to the question, "How does an institution engaged in preparing teachers assure itself that the product has the competencies and qualifications of a good teacher?" Perhaps I am premature in raising this last question. Thank you.

ORGANIZATION OF CURRICULUM IN THE SCIENCES

SCIENCE COURSES AT RUTGERS

LEATHEN

Currently, at the Rutgers Bureau of Biological Research, our major theme is protein metabolism. This means that we have colleagues of many disciplines, including bio-chemists, physiologists, geneticists, embryologists, zoologists, all working in the same physical unit and collaborating in their best way on this subject.

As I am sure you are all aware, we have at the same time the problem of the cost of equipment and of instruments for performance of experiments, which are sophisticated. Therefore, we have tried to use our Bureau as having a sort of communal setting, where very expensive equipment may be used by several investigators more efficiently, or even for experiments which are purely trials out about which the results are unknown. These collaborative efforts have been our means of trying to approach broad problems; and, at the same time, we endeavor to train our graduate students, who may now be working in some small area but of necessity are in contact with faculty, researchers working in different but related projects, as a means of training. We believe these efforts are reasonably successful. I personally feel they have been quite successful.

As to instruction, our major problems are at the lower level courses because of large enrollments. It is fine when one has five or ten students in biology, but what does the professor do when there are one thousand? Our efforts have been to attempt to move instruction to use of television. In so doing, we were concerned with whether it would or would not be successful.

We are now in our fifth year and confident that we have reached the successful stage of using instructional television (ITV) for a thousand or more students in

General Biology. Our feeling at the moment is that ITV will not relieve the effort needed in preparation of a lesson, but it does help us to train many students. I am not sure whether in Italy you have had a similar experience in using ITV techniques.

VACCARO

Yes, we have. At the School of Anatomy, University of Rome, we use in a very systematic way closed circuit television. In other schools, we are using this medium.

I should like to ask, at this point, how one can reconcile this method of teaching or do research, as Professor Leathem just explained, namely, teach research techniques and simultaneously have students conduct research. In short, what proportion is there between your laboratory facility and the number of students in the class? Does the enrollment permit each student to learn to conduct research efficiently?

Still another problem is this: it refers to the velocity of transformation of information, the progress, if you will. Let us assume a student is graduated with an advanced degree in biology. He then goes into military service and he comes back after five years. He will undoubtedly be disoriented and ignorant of the advances that have occurred in his discipline.

Now, what is it that you do to maintain contact with graduates who of necessity need to keep abreast of developments in a particular field?

LEATHEM

In the sciences and in research training, we actually do only a small amount of training for the student, who is not seeking an advanced degree. At Rutgers, we do attempt to instill in each student, at least in biology, the principles and

methods of science, an interest in research by providing opportunities for each undergraduate to engage in bona fide research problems, and during his senior year he may be elected a "Henry Rutgers Scholar," and thus engage in independent study.

For our graduate students, we have used every means that I believe you have also used--that is by seminars, by interacting with industry, by having courses that are available for upgrading and modernization, etc.

You have raised the question that if a man were five years away from his field how might he possibly become relevant? We have been making some efforts in this area. For example, we provide opportunities for both teachers and industrial personnel to enroll in in-service courses and laboratory training.

Our ITV courses are beamed only at the first course, the very large course, not to individuals or small groups. For the advanced student, our biology groups are usually 40 and each with a laboratory.

VACCARO

I understood you to say that there might be as many as 1,000 students enrolled in the first biology course, and approximately 24 graduate students in most advanced study groups. Do you use the "shift" formula in arranging laboratory sessions?

In Italy, we are unable presently to have groups of 24 students because the relationship between the student and the teacher is so unfavorable in certain schools and colleges. So, as a result, we are forced to schedule longer sessions. We have been unable to have shifts in the same laboratories because they are inadequate in size and insufficient in number. What is the situation here and in the United States?

LEATHEM

First, in reference to Rutgers, we have 36 laboratory sessions for General Biology, and six laboratories that are in operation simultaneously for one course. Sections can meet as often as three times in one day. We have preparators, who provide the materials for each laboratory.

QUESTION

In the three shifts that you operate in the one laboratory, is it with the same assistant professor, or are there different instructors or professors in each of the laboratories?

LEATHEM

Until rather recently one course would require three lectures in one hour and a single laboratory. This was modified so that we now teach two lectures of 75 minutes each with one laboratory. An assistant will conduct no more than two laboratories.

Now, with this change in scheduling, the lectures, regardless of the course, be it theoretical, or biology, or English, the lectures may fall the first hour of the morning and the last hour of a Thursday afternoon. They are widely scattered and we, therefore, have biology laboratories in the morning and in the afternoon. There is no format of instruction that separates the courses at time intervals.

QUESTION

With the norms that are used to divide these students into different labs, how do you make a division into groups? Is it done by the students themselves?

PANE

We do it by computer. Each student writes down the schedule that he wants to follow: these five subjects, and he specifies each one by number and title. He

does not decide the instructor or hour; he only decides the courses he plans to study.

We drop the schedule into the computer and in short order we receive the programs of 1,700 students with maybe 45 or 50 problems. We inform all students when they plan their programs each semester, that they must choose an alternative course. If one cannot, for example, have History of the United States, what would he choose instead--if he can fit it in? In case of conflict, he may take another history course or an elective.

If there is no possibility of selecting an elective course, it will come through with the student's second choice. There has been only one student this year in the entire enrollment process who actually could not fit into his schedule as submitted. He was just one of about 1,700 student, who wanted to study some peculiar program.

I have used the computer also in order to establish the hours of instruction for courses in romance languages for an entire college. We have to decide the hours for an array of offerings and the instructor's work day. Each head of department writes down all of the offerings. In so doing, I proposed 154 classes--French, Italian, Spanish, and Portuguese--and I decided at what time these courses should be given. I have to keep in mind the work day of my colleagues, who teach each course. I cancel courses I do not want for the year, and I add new ones. I indicate the hours and I give each course an appropriate instructor. The rest is up to the computer. Out comes the result: "17th and 18th Century Literature," number so and so, Tuesday at 4:30 to 7:00 p.m., in Campbell hall, by Professor "X".

Now, generally speaking, when the student registers, he is able to be officially enrolled. But when we come to scientific subjects, which now require two lectures a week and one laboratory period, there must be a relationship between theory and

practice in the lab. For example, we may have 200 students or there may be 10 groups all studying the same subject--biology, for example. They are divided in accordance with the lesson. The same students go to the laboratories. But this is not true in the History Department. In Western History, for example, where there are 450 students in one room, the professor lectures to the entire class. Later, they split up into groups of 20 in order to have some dialogue with instructors and co-students. We use both systems.

CARNACINI

I deduce Professor Pane, as the Chairman of a Department, has certain prescribed administrative duties and responsibilities and I assume he has some teaching function, also.

Now, in Italy, we do not have this system. The President of the university, and the Dean of the School actually have to do as much teaching as anyone else. This is a very foolish thing insofar as I am concerned.

Now, at one time, we used to say, if one is the President or the Dean, how can he detach himself from the teaching function? Perhaps this was a valid argument when our classes were small; but, today, when we have a large volume of students, we have to be either an official who dedicates himself to his particular function or else he has to bow out of teaching.

We have understood that here in the United States the lessons are not given by the same instructor or the same professor, so that the 1,000 students mentioned do not receive instruction from the same teacher. If this is so, how many hours does one professor teach?

PANE

In our department, for example, there are 42 full-time faculty members--instructors, assistant professors, associate professors, full professors. In addition, we

have 28 teaching assistants, who give one lesson, or four lessons a week-one course each week. These teaching assistants are graduate students who teach one course in a language, four times a week, a total of five hours; twice 75 minutes, and twice 50 minutes, four times a week.

The full professors, on the other hand, teach three courses of three hours each; so, all 41 colleagues in the department teach at least nine hours a week--three hours of 50 minutes at the graduate level. Our Dean does not teach. He could teach, but then we could not have an administrator.

When we at Rutgers recruit and appoint a professor, he has a prescribed role. He may be named as a dean of a college, or he may be a professor of biology. If his colleagues no longer want him as dean, then he may assume full time teaching duties in the department of his discipline.

It may be of interest to know that our President is a full professor of philosophy who still teaches a course twice a week. He insists that in order to maintain contact with students he needs to teach. There are other key administrators who also teach for the same reason. It is not compulsory to do so; however, tenure is acquired through rank, not through administrative assignment.

QUESTION

I should like a clarification, please.

I am not quite sure that I have a correct definition. In the event there are 400 students of history in a course, is it true that a lecture is given four times a week, or two times a week, or five times a week?

PAGE

All humanistic studies and the social studies as well are convened three hours a week; but in the first year language courses and the second year courses, where

it is necessary in order to have a certain amount of practice or a continuation of practice, we insist that they have five hours a week. In the science courses, the theoretical aspect is scheduled three hours per week; but, in addition, there is a laboratory period of two hours for biology, geography, geology, etc. In bacteriology and in zoology, there are also three-hour sessions. So, some labs last from two to four hours in accordance with the subject.

QUESTION

Maybe I am still confused. I think you said, Professor Pane, that with 400 students in a history course they would meet for three lectures a week, two lecture sessions, and one seminar a week. Let me cite an example: I go Monday and Tuesday to attend a lecture and then on Thursday I participate in a seminar session. Now, if it is not the same teacher, who gave the two lectures? Is it a teaching assistant or an assistant professor,

PANE

Of course, the department might decide this matter in accordance with the personnel that it has available and the requests that it receives.

So, the 400 students in biology, for instance, might be split into groups, in which case we might have two large lecture classes, and discussion groups, or seminars.

QUESTION

This matter is important to us, Professor Pane, because we are preparing new university reforms in Italy. May we have your explanation?

PANE

Let's go to a literary department, the Department of Letters, for example, and deal with one at a time.

In certain subjects, there are two courses a week, or a total of six hours of class time. We have at Rutgers College 26 departments. In certain of these, professors teach only two courses a week, a total of six teaching hours. In certain other departments, they may teach nine hours a week or three courses, and in certain other departments it may even be 12 teaching hours a week, or four courses. So, it goes from six to 12 hours, depending on the department.

QUESTION

Please, excuse my persistence; but, if a full professor teaches six or nine or 12 hours a week, is his teaching load correlated with the pay he receives?

PANE

No, the number of hours he teaches has nothing whatever to do with his rank or pay as an instructor, assistant professor, associate professor, or full professor.

A full professor does not have any special rights. Those who are selected as teaching personnel have the same dignity as all faculty members have. This is a big difference that I want to convey. An instructor in my department has status as a full professor when I defend him before the Dean. His instruction, his teaching has the same basic value as others. Naturally, a full professor has a lot more classroom experience, but the instruction of faculty members in lesser ranks is equally important.

In my department, all members teach at least nine hours a week. The load depends also upon the research they are engaged in. One needs time for personal research.

LEATHEN

Furthermore, if a professor were teaching 12 hours, it would be more likely that he would be teaching a course, not teaching four different courses. It would be

quite unusual to have a full professor teach more than two different courses. We attempt to give them, if not better salaries, at least smaller teaching loads as part of the market negotiations to get and keep good faculty.

QUESTION

Going back to the 400 students in history and the method described for splitting them up into groups and classes. What are the criteria used for dividing the 400 into groups?

PANE

In certain cases that depends upon the classrooms available.

If we could have a room for 100 students, or 600, let us say, we would put 600 in the classroom. If the classroom had space for 1,000, we might fill it to capacity, but it depends on the number of students enrolled.

We have a professor, who is specialized in Byzantine history and who has 120 students in his class. We could not split his class into two for two reasons. We do not have another professor of Byzantine history; but, more important, those 120 students wanted this particular course because of the existence of that professor. So, we look for a classroom to fit his 120 students.

In the first period, I had 105 students in Italian. Those students did not register because of the professor, inasmuch as they did not know who the professor was. We never specify the name of the professor during registration. We merely list "staff," and process the master course offering list through the computer in order to get section groups. Currently, we have no classes larger than 20 students because I insist that this is the greatest efficiency.

In order to learn a language, it is necessary to have no more than that for insuring sufficient dialogue between students and the teacher. When a student begins

to learn a language, it is the professor who has to talk during the preliminaries. Then, you must maintain an ongoing dialogue, using the Socratic Method. Every week, we require a theme, which has to be corrected by the instructor. So, you may see the logic of having nine credit hours as a normal load.

GROBMAN

The moderator has asked me to talk with you about free college education in the United States. So, the paper I prepared and is being distributed is one which I used for Fulbright Scholars--visitors coming to the United States. With your permission, I shall go through just a few of the items because I realize you can read it when convenient.

On the bottom of the first page is a chart. You can see that our students enter college in the United States after finishing 12 years of preparation. The old style was eight years of elementary and four years of secondary school (called popularly the 8-4 plan).

Recently, we have decided that because of the maturity of students who have experience, some communities combine the twelve years and make a 6-6 plan.

Now, let us talk briefly about the top of page two, containing very important statistics for understanding American education. Note that virtually all of our children (99%) go through elementary school. In our secondary schools, 90%; and college, 40%, now close to 50% (43%). This makes it entirely different from European education in which you have much more select students because you work them harder for higher attainment. We have a much broader base and more of our students go to college. So, it is almost a different system. We do not, I think, do as well with our bright students as we would like. On the other hand, I think many continental countries do not do as well with all the students in the broad spectrum.

The next part of this paper deals with the nature of the curriculum in the secondary schools of the United States. I believe you may wish to read about this topic later. It is not important in this discussion.

(Intermission)

PAEDO

Many years ago, even before World War II, I had a close friend who taught at Columbia University. He told me this anecdote which impressed me considerably. It is about an Italian who lived in New York with his two sons.

The two boys were studying at the same college. One was extremely intelligent and acquired high scholastic standing. The other was very good at sports and was captain of the football team.

So, one day, the father went to get some information on his two sons who were studying at the university. He went to the Dean, who gave the father a full report on the progress of both boys. The father was very pleased with the academic progress of his intelligent son, but he shortly realized that the Dean sympathized much more with the boy who was captain of the football team.

The Dean told the father that the athletic son was not very good at studies, but he was excellent at football. To the Dean, it was evident which was more important--balance.

We do not take into account sometimes the importance of maturity and balance. That boy found something to do, and he did it very well as a member of a sports team, but his academic boy lacked balance.

GROBMAN

Another factor influencing training is that the preparation in humanities is more exclusively for teachers, who are going to instruct in colleges and universities, and who need a more diverse background. On the other hand, there are many who concentrate in the sciences and who go directly into industry or to work in rather specialized activities. These latter students do not need the same breadth of background in humanistic studies.

ROLLA

I have understood very well what has been said, however, I should like a clarification. I am not quite convinced, yet, on the first of these two reasons, that there is a possibility of greater financial assistance in the scientific field than in the humanistic fields.

If so, how does this factor influence the relatively small number of students who embark upon scientific study? It has been my impression that there has been consistently a greater amount of funds available to conduct scientific studies.

Let me, please, make an observation that has perhaps already been made by Professor Carnacini and others here. I believe I can affirm that in Italy the situation is of a different nature in regard to studies at the Lyceum.

Until a short time ago, humanistic preparation at the Lyceum was very traditional. Today, this situation has changed somewhat insofar as studies in Greek and Latin are concerned. For example, the ability to translate directly from Greek or Latin into Italian has waned. So, the situations today both in America and in Italy are closer than they were traditionally.

Another observation has bearing upon a certain rapprochement today in the formulation of university study courses. In Italy, the Law of 11 December 1969, has brought about a liberalization of university studies, bringing about the

the possibility of student selection of electives and in contrast with the rigidity of our traditional system. There have been beneficial results even though we are undergoing a difficult period of adjustment to determine processes and implementation of the Law.

BENJAMIN

I would like to make several observations that have something to do with what you have been saying.

As a teacher of Latin, Greek and Archeology at the University, I have a situation that many of you had to take in the Lyceum five years of Greek and twelve years of Latin. In my opinion, there is very little humanistic training in the classics in any American secondary school. Those who do take it, want it, or they have stern parents. Thus, in the humanistic field, like the classics, we are faced with a situation of finding persons qualified to teach Latin or Greek.

Here at Rutgers, we have beginning courses in both Latin and Greek. It works! We are very fortunate in getting students who want to take it. The other thing that has happened with us is that it takes a little longer in graduate work; so, we usually suggest that students spread their studies part-time to give them time to absorb the language, or to go to Italy to study archeology in the middle of it.

This explanation illustrates the length of time we need, and it also explains something of what has happened to the humanities in the United States. We are now in the age of the social sciences. We must, therefore, compete for students in the humanities. No absolute requirement of Latin or Greek would even be desirable for modern American students; we could never force it down anybody.

I think that humanities programs all over the world, not just in the United States, are going to have the same type of experience that mass education faced in America during the 1900's. I might conclude by saying that Latin and Greek do speak to the masses, but in meager numbers.

FAEDO

Our requirements heretofore have been two years of foreign languages and social studies (undergraduate), and two years of science and mathematics. This year, however, our reform act and its accompanying change has brought into being a new system. The student must now follow certain courses in four to six fields. These are humanities, social studies, mathematics and sciences, literature, foreign language and creative arts or communications. In effect, the student can now eliminate from his four-year university program two fields completely, and he only needs to have six credits (one course per semester) in each of four fields. Thus, the student who is weak, say in the sciences, does not have any science courses at all if he chooses not to have them. The problem then is whether the system is valid for all or for a limited number of universities.

In the Italian secondary school system, there will also be a change because there will no longer be the strong necessity for insisting upon the study of foreign languages, or upon four years of mathematics, etc. The trend is toward giving students a rather wide choice in selection of subjects. Recently, there has been a dialogue where proponents of change favor our eliminating certain courses that are normally required for entrance to the university.

I am not in agreement necessarily with our earlier statement that in Italy at the secondary school level we have a greater emphasis on humanistic rather than scientific studies. During the first two years of college, we also depart from

the rigid curriculum of yesteryear. Professor Benjamin told us how many students begin Latin on entering college. I feel that perhaps they also start mathematics almost at zero at the university level. Would this then not explain the enormous difference that exists between our two systems?

As far as I am concerned, the difference resides in these two concepts that until the present have been in effect in Italy and in the U.S. with regard to the preparation of scientists and men of letters.

We are still of a mentality which fosters a unified culture; for example, a mathematician, even if he specializes and studies in depth in his discipline, it is inconceivable that he has no knowledge of other fields. One specializes in one particular field of study so that he may read a paper, say in mathematics, and then be quoted widely on the assumption the results are correct.

Before conducting scientific research in Italy, it is necessary to have six or seven years of study in a humanistic field. We cannot accept what a colleague says who reassures us about the results of a certain study unless we understand it. This is why in the sciences it is necessary for one to study a greater number of years.

I would very much like to ask a man of letters if he had ever attended a major conference not particularly akin to his discipline, and whether he understood anything that was being said. In the field of the sciences, and I am speaking now of mathematics with which I am most familiar, this often happens. It is not the length of time required nor the length of a thesis that brings recognition in Italy. Frequently, the number of pages is in an inverse relationship to the value of a thesis. It is my judgment that the really valuable treatise is one that employs precise rules, is rigorously defined, whether in the abstract or in their practical connections, and is presented in terse, logic format.

QUESTION

Is there great unemployment among teachers in the United States?

PANE

In certain specialized areas, yes, let me explain. With the population explosion beginning in World War II and as a result of the explosion of knowledge since the war, greater numbers of youths are remaining in school. We now have more than seven million students studying at the post secondary school level, or about double the number of students enrolled in 1960. So, in less than a decade, we have a 100 percent increase. By 1975, according to the projections, there will be 14 million students at the college level alone. The question raised constantly is, will there be teacher personnel available then? But conditions have and are changing.

Each year in December, the National Conference of Foreign Language Teachers is convened. During the conference, interviews are scheduled for candidates who are interested in certain anticipated vacancies. Time was when the number of candidates was in short supply. Conditions have and are changing, however. My colleagues in the field of English, for example, have found that there are many more candidates than positions available. Similarly, in German there is a super-supply of well-qualified candidates for every opening.

We are now beginning to develop a certain disequilibrium in some subject disciplines and an equilibrium in others. It is becoming apparent, for example, that more degree holders will be needed in sociology and in communications. You may have noted a new classification in our college announcements that is called "Creative Arts and Communications."

At the secondary school level, there presently is no disequilibrium, since there is no specialization as in the university. One local school superintendent

reported recently that with no recruitment effort on his part he is in receipt of enough applications from well qualified candidates to staff another school system of the same size.

After World War I, the study of German was abandoned completely, for which reason those who were qualified to teach German had to find a livelihood in other fields. During World War II, the study of French suffered considerably. On the other hand, with the good neighbor policy, the study of Spanish in the United States increased considerably. So, we have experienced this type of disequilibrium, but the global number of teachers is on the marked increase largely because the profession is attractive to young Americans, men and women.

ERMINI

It seems to me that the basic problem, the in-depth problem that makes our dialogues so interesting, lies in the fact we represent two completely different cultures, each with its own traditions.

Italy was the cradle of humanism. It is not only literary and artistic, but it also encompasses the sciences, sociology, philosophy, law, psychology and the general knowledge of human relations.

The American concept of humanist studies, I think, is a different one, based largely on what humanism represented in Italy in the 1500 and 1600's, but not before. Because of this different type of orientation, different cultures arise. In Italy, we witness this among our youth beyond 14 years of age, and it is in sharp contrast with youth of a corresponding age in the U.S..

In Italy, we have been very proud of our classical lyceum, where students were not limited just by the formal aspects of education; they also received a certain kind of orientation. As a result, the program developed certain bounds that limited our society and that created conditions that today are somewhat damaging.

We are now attempting to remedy the situation and to overcome the restrictions.

In 1924, we underwent a reform of secondary education that bears the name of a philosopher, a humanist of very extensive culture, named Giovanni Gentile. That reform accented to an even greater depth humanistic study, but permitted certain technical studies--at a tolerance level.

Now, scientific studies are a useful thing for man to live by as is knowledge of things governed by laws that bring discipline to society. However, the reform gave definite emphasis to literary humanism--the historic, the juridical, and the artistic. This was an error, and we politicians are aware of this. We fully appreciate that some minds are made for certain studies, and other minds are not. Both are worthy minds that require different kinds of education.

We are trying now to correct this particular difficulty. One significant step has been to allow each graduate of our secondary schools the right to enroll in any college of his choice and also to select a discipline in which he is personally interested. By so doing, we hope to shed this "straight jacket" which was imposed by the high school.

In conclusion, I believe it would have been much better to have reformed our secondary schools before the universities.

GROBMAN

In America, we are getting to the stage where we have many more of our young people studying biology. We recognize that very few will become professional biologists, but we feel it is important for them to have this knowledge if for no other reason than they may become informed and good citizens.

PANE

To give you some appreciation of the international dimensions of curriculum reform in the sciences, let me point out that Dean Grobman has travelled throughout Latin America and Asia on behalf of the Biological Sciences Curriculum Study. Wherever he has visited, he has interpreted the new school science curriculum programs that originated in the United States and Britain during the decade and have subsequently had a world-wide impact.

FAEDO

As Professor Vaccaro has indicated, there were to have been two biologists, in our group, who at the last moment were unable to join us.

As the President of a University and a mathematician, and therefore at some distance from biological sciences, I must admit that I follow assiduously the general outlines of courses offered on-campus and I can support Professor Pane's statement on the impact made by Dean Grobman's leadership in the field of curriculum reform of the biological sciences.

In my university, for example, there is a faculty-student group that is quite advanced insofar as their study of animals, birds, and less developed animals and species is concerned. They are endeavoring to determine how the less developed animals evolved into highly developed animals. In addition, there is in progress an extensive study of ecology at our campus and at others. Indeed, I am much impressed with the efforts of the Biological Sciences Curriculum Study.

GROBMAN

Inasmuch as we have been discussing the international scene, I call your attention to some of the British biology texts. I just happen to have more of the American texts here than others. I am also pleased with the way our Study has become

an international movement.*

QUESTION

How does one become a biologist in the United States?

GROBMAN

A student usually enters college with an open mind about his objectives. He does not decide in what he is going to major until he is in his second or third year of college. Then, if he thinks he might want to do it earlier, he picks chemistry, or physics, or mathematics and he continues. If he decides to be a doctor, he continues a premedical program. If he decides he would like to be a professional biologist and to teach at the secondary school level, he takes the required education course while he is concentrating in biology and is graduated with a bachelor's degree. If, however, he decides to teach at the college level, he goes on for an advanced degree, does his research projects, and acquires a Ph.D. degree.

QUESTION

Is that same path also followed for one who wants to be a specialist? I refer to those who seek appointments to health institutes, or to the Federal Department of Agriculture.

GROBMAN

If he thinks he is interested in molecular biology, the student will study physical chemistry, biological chemistry, physics, mathematics, etc. If, on the other hand, he is interested in ecology, he will then study more geology, some chemistry, geography and the environment-type courses at the graduate level.

* Since this dialogue occurred, Dean Grobman has visited Italy and a number of Asian countries during the winter of 1970 including Burma and Thailand and the Philippines, for discussions with university faculty members in the Asian Association for Biological Education.

QUESTION

If a student has selected among his basic studies biological chemistry, is he also advised to study organic and inorganic chemistry? I ask this mainly because I feel one cannot study biological chemistry if he does not have a background in organic and inorganic chemistry.

LEATHEN

Here at Rutgers, biological chemistry is offered in the biological sciences and in the Medical School--not in the Chemistry Department. Biochemistry is also offered in the agricultural school and it is called agricultural biochemistry. The student must study both organic and inorganic chemistry for background.

QUESTION

I believe that the sciences today are creating barriers that make it impossible to isolate special types of learning from other types. As an example, I just opened a book here by chance, and I note a page with a large photograph, very likely done by an electronic microscope, of chromosomes.

Recently, we had an international conference which brought out a volume by an academic press on chromosomes. A study of chromosomes was also made with an electron computer, illustrating my point, that there is a certain interrelationship among the sciences. Thus, it has become necessary to have certain basic foundation stones, which would be provided by scholars who are in a position to give the broad horizons, and to have other scientists who would dedicate themselves mainly to the detailed aspects and the frontiers of their discipline. Do you concur?

LEATHEN

Your comments are certainly germane. We have exactly this problem, the problem of inter-communication between the sciences. It is also a problem of coping with the enormous volume of literature and of training graduate students to contribute properly. We have yet to find the means of resolving these problems satisfactorily.

You commented on mathematics. How much mathematics can a biologist take?

How much should he have to be a biologist?

We are currently concerned with the problem of biophysics. The biologists, of course, say that he must be well trained in biology, with a little bit of physics. The physicists say that he must be well trained in physics, with a little bit of biology. Now, since our Dean of the Graduate School of Arts and Sciences is a physicist, we still do not have a program in biophysics.

I concur; we must find some mechanism whereby we can inter-relate between fields more effectively.

FAEDO

May I add that I have had an experience that perhaps might be shared.

In centuries past, there was the well-rounded man. There were great figures, like Aristotle and Galileo, who dominated an era. But, today, we have only a substitute for this man. He has become a group, so to speak, because one man is no longer sufficient. We sometimes call this group, consisting of many scientists who are specialists in a minute area, a cooperative research team.

I believe that in order to have cooperation fully functional we need to have bibliographical materials instantaneously available, because the input in science has been so great that it has become physically impossible to follow the latest developments.

In the field of mathematics, for example, we have, in my Institute in Pisa, more than 200 publications and reviews that appear several times a year. Now, if we take just one of the Italian journals of international interest, called the *New Basis for Physics* (it is very large, I believe a scientist today could cope with it much less keep abreast of other important periodicals and professional

journals). As a result, I think that today the true function of the cooperative research group, assisted by up-to-the-minute bibliographic materials and documentation, may become the substitute for the scientific man of yesteryear.

III. PROFESSIONAL EDUCATION

1. Value of the University Degree in the Italian Legal Order*

The problem of the value of the university degree in the Italian legal order is closely connected with the more general problem of the autonomy of Italian Universities, a problem which is dramatic particularly today and on whose solution, in part at least, the fate of the university itself depends. Autonomy does not mean, or only mean, power of self-management from the administrative, didactic and disciplinary point of view, as is today hypocritically established by a norm which is increasingly being emptied of any real content, but rather liberation from its present condition as an instrument to which the state has assigned a particular goal, alongside its natural and universal goal of the progress of science. Here we are referring to the goal of "furnishing the scientific culture necessary to the exercise of offices and professions," as stated, along with the promotion of science, in Section 1, Article 1 of the Law on University Instruction (Testo Unico delle leggi sulla istruzione universitaria) instituted by Royal Decree N.1592 of August 31, 1933. This is an unnatural goal which has, although within certain limits, succeeded in prevailing over the University's primary and natural goal -- the progress of science -- conditioning its entire structure and transforming it from a matrix of science into a slave of the state.

This is a real problem, not always recognized by everyone. More often, we prefer to talk about freedom from controls and self-government in didactic matters, without considering that the real autonomy, the real freedom, of the

*This is a verbatim report delivered by Rector Tito Carnacini,

April 9, 1970.

university, lies in being only the forge of science, of knowledge for its own sake, without anything to bind or condition it.

What I am saying may seem rather rash; but, in reality, it only parallels what other eminent students of the problem have already denounced, attributing to the legal value of the university degree, a negative and harmful effect that undermines the very foundations of the university. "We are once again consecrating the legal value of what is the danger, the greatest plague of our universities, the legal value of the diplomas and degrees granted by our schools of various types": these are words pronounced by Luigi Einaudi to the Constituent Assembly on April 29, 1947, during the debate on the schools with regard to an amendment proposed by the Hon. Dossetti and others to Article 27 of the Draft Constitution, later to become Article 13 of the Constitution. This article, after establishing the freedom of science and art and their teaching, delegates to the Republic the task of establishing the laws governing education and prescribes a state examination for admission to, or graduation from, the various types and levels of schools and for licensing to practice the various professions, while maintaining autonomous statutes within the limits set by the law. "Permit me to call upon my almost fifty years of experience": - Einaudi continued - "the thing that most greatly disturbs the universities is the fact that their courses, rather than being directed towards the pure and simple exposition of scientific truth, are oriented towards the achievement of diplomas which have no value, neither moral nor legal. Since this Article once more consecrates the legal value of these pieces of paper, I shall vote against it."*

*"La Libertà della Scuola," in *Scritti di Sociologia e di politica in onore di Luigi Sturzo*, (Bologna: Zanichelli 1953), pp. 117-118.

2. The Problem in Light of Laws Governing the Value of University Degrees.

According to the above-mentioned Law on University Instruction,* the degrees granted by the Universities have the value of academic titles only; no one can practice a profession (understood in the broad sense, and thus including the activity of teachers in the secondary schools and functionaries of the Public Administration) if he has not passed an appropriate state examination, which may be in the form of a civil service competition for permanent state employment (concorso pubblico) or licensing examination (abilitazione) to practice certain professions. Only persons holding university degrees are admitted to these state examinations. There are very few exceptions: general and superior officers in the Artillery and Army Engineering Corps, the Navy and Naval Engineering Corps, Airforce and Airforce Engineering Corps, at the end of their active service, may obtain licensing as engineers through a degree from the Ministry of Public Education, even if they do not possess a degree in Engineering from a university. They must, however, have successfully completed the courses at the military Artillery and Engineering School; or, if they are Naval ships' officers, one of the higher technical specializations of the Navy. The above officers are then exonerated from taking the state examination, if they can show, through proper documentation, that they have carried out technical activity in the Armed Forces for determined periods of time and that they possess the necessary qualifications for planning and directing engineering works, by means of their technical knowledge and experience.**

Thus, the university degree has "legal" value, which means that the state takes upon itself the right and the duty to organize education, ensure its efficiency and thus provide for the formation of those who intend to practice free professions

*Art. 172-173.

**Art. 180, 184 of the Law on University Instruction.

or hold positions in the public administration. It accredits the validity of academic titles before the national community and further guarantees that only those who have earned these titles may occupy such positions or practice such professions, since their academic titles testify to their "aptitude" for these offices and professions, reserving the right to assess their actual qualifications by means of a further examination, likewise administered by the state.

In those cases where the state is not directly responsible, as in the case of the free universities, whose degrees also have legal value (that is, they are guaranteed by the state), it exercises a series of preventive and follow-up controls which, beginning with assurance that the institution's statute corresponds to the general interests of study and university instruction, extend to approval of the suitability of the school's financial plan with respect to the goals it has set for itself and decisions concerning the Facoltà: Schools and courses that make it up. Finally, the state reserves the right to close down such institutions, either totally or partially, if it so decides.*

3. Responsibility of the State

Thus, the state is responsible, even if sometimes only indirectly, for university instruction and for guaranteeing the validity of the degrees granted by the universities themselves. In this, the Italian university system follows, in its basic and essential lines, the Napoleonic model, on which it was initially patterned.**

*Art. 198 ff. of the Law on University Instruction.

**Luigi Einaudi, "Scuole e Libertà," Prediche inutili (Turin: Einaudi Editore, 1959), p. 13.

Such a system no longer finds any justification in modern Italian social reality, which is pervaded with new needs and demands.

For that matter, the system is contradictory in itself: it is senseless to have a university degree with legal value when a state examination is also required, and-- as everyone agrees --this examination does no more than repeat what has already been tested during the candidate's university studies. Either one or the other: either the university degree, or at least its legal value, is useless or the state examination is useless. The dilemma is beginning to be recognized by the Italian legislature, since with Law No. 442 of March 12, 1968, it established certain courses of university study whose degrees have automatic licensing value, at least for the purpose of teaching in the secondary schools, thus restoring the situation that existed before the Gentile reform. But this is not the point.

What we need is the elimination of the legal value of the university degree, of that legal value which not only limits freedom of teaching, because of the necessity for a formal approach tailored to a pre-determined goal that can never be disregarded-- obtaining one of those so-called pieces of paper --but also conditions the structure of our universities and compresses their real goal, which is the progress of science.

Many difficulties will undoubtedly have to be overcome to arrive at this result, difficulties connected with the different conditions of life, of environment, of development and mentality at work in our society, in the North and in the South.

In a recent debate on the same subject as this present report,* it was pointed out that 56.3 percent of Italian university graduates are state employees, including

those working as teachers (49.2 percent); 11.7 percent are employed in primary and secondary economic activities; 7.6 percent in commerce, finance, insurance, transportation and communications; and 24 percent practice free professions or other social activities. The bulk of university graduates are thus absorbed by the state itself, naturally by means of competitive state examinations. It is precisely this situation that weighs most heavily upon us: public employment is still the greatest resource for university graduates in the southern regions of Italy, where only very recently, for well-known historical and environmental reasons, has an industrial economy and, above, an industrial "mentality" begun to develop.

In this situation, the legal value of the university degree plays a very important role: in a world still dominated by patronage, in a socially disorganized world where the precariousness of employment makes stability -- stability that only state employment can guarantee -- the highest of aspirations, the university degree and following state examination constitute a defense against partiality and favoritism and a platform of initial parity for all those who set out to win state jobs. In the last analysis, the university degree (along with the following state examination) hinders unfair competition; and, seen in this framework, the legal value of this degree acquires an almost vital importance. It ensures that only those who have earned it can compete for public employment, without the danger that others, through patronage or favoritism, take available posts away from them*.

These considerations are undoubtedly important, but not enough to exclude the possibility and the opportunity of a reform of the value of the university degree and a consequent reform of the state examinations.

*These arguments were expounded in the course of the Round Table cited above.

If what we have said above concerning the university graduates of Southern Italy is true -- or still true (we must ^{not} forget that by now the structures of Southern society are changing) -- it is also true, as has been observed,* that the legal value of the university degree produces bitter disappointments and "unemployed intellectuals" among those who, after an often long and sometimes vain waiting period, think that with their degree they have earned a right to a job that ensures them a suitable living or social elevation.

4. Urgent Need for Reform

We must, therefore, reform and reform without delay. The university degree should have no recognized value, other than that of a title of culture as an end in itself. The benefits would be many: students-- or better "scholars" -- prefer the better universities, which would lead to a certain competition among the various institutions and thus to greater commitment in teaching; the universities would attract only those interested in study as such, and not as a means of obtaining a legal title; everyone would have access to public employment and the professions, without the useless and unjustifiable discriminations, practiced up to now. Naturally, parallel to this reform, it would be necessary to render the state examinations more severe and more functional, making them instruments of real selection; and the candidates in the various fields would not be many more than they are today.

But we cannot wait any longer. For the welfare of the university, of science and of society, it is categorically necessary "to arrive at a re-evaluation of the of the prestige and social significance of our titles of study, above and beyond their formal juridical value which, general and indiscriminate as it is today

*Einaudi, op.cit.

is a source of misunderstandings and their intrinsic devaluation": and this is the opinion of the Standing Conference of Italian University Rectors.*

*Meeting of September 20-21, 1965. See A. Sensini, La Riforma Universitaria (Florence: Sansoni, 1966), pp. 197-198.

COMMENTARY

DEAN JACOB

In the Law School, we have at the moment three degrees which we grant. We have the J.D., which is the Doctorate of Jurisprudence, formerly the L.L.B., Bachelor of Law. Because of certain difficulties in the Civil Service regulations that did not permit one to become a certain P-14 or P-16, based on whether one had a doctor's or a bachelor's degree, there was a movement begun about five years ago to change the degree to a J.D.

We also confer the L.L.M., which is a Master of Laws degree. This is an anachronism right now. We have to clarify this in some way because one becomes a doctor at the end of three years' study, and then after another year of study he obtains a Master of Laws degree.

We also award the S.J.D., which is the Doctor of Juridical Science. I wanted to mention this degree because later on I shall explain the difficulties we are having in legal education in America. One other law school awards the J.M. degree, which is a Master of Jurisprudence, a two-year program beyond the J.D.

We now have in the Columbia Law School approximately 1,000 students. In the graduate program we enroll about 50 to 60 each year, approximately ten of which will be working towards an S.J.D. We always have a very interesting group of students from abroad that meets separately for the first semester in trying to bridge the gap between their own legal systems which they have studied and the American legal system.

In determining admissions we use not only candidates' college records, but we also require a nationally administered test on aptitude, on general background, and on structured English. On the whole, our procedure has worked out extremely well, except when we come to foreign students. There are some variations of English that are difficult for them to grasp quickly. Therefore, when it comes to foreign students, we do not keep them to the same standard that we do for those

who speak English as their native tongue.

It might be helpful to you, while you are here, if you inquired about the Legal Aptitude Test at the Educational Testing Service, Princeton, New Jersey, because about 90 percent of the cases tested, when they predict success, it has worked out that way. But there are occasionally striking cases in deviation. Let me cite this as an illustration. In our own case, one of the lowest men, so far as a test score was concerned, finished right at the top at Columbia. Two or three years later, at Harvard Law School, the bottom man finished first in his class.

We have faculty committees on admissions so the greatest problem a dean has is to keep committee members educated and not let them become mesmerized by the numbers, in thinking that scores are something solid, because they are not always solid.

Now, the Law School is governed, of course, by the faculty that makes all educational policy decisions. I wish I could tell you that the administration and the faculty always agree on educational policy, but we do not. The faculty of the Law School meets usually once a month, but there have been meetings as often as twice a week. It is a very closely knit faculty. For example, we make no appointments to the Law faculty without unanimous consent. Now, this does not mean that there may not be two or three people that may object to a particular appointment; but in all cases, at least up to this point, if there are only two or three who object they say, "Well, there is such a preponderant view in the faculty in favor of this appointment that we will cast our votes in favor." We only recently had a test where there were eight people opposed to an appointment, and the faculty tried to over-rule the unwritten law that appointments are made unanimously. I was very pleased on that occasion inasmuch as the faculty then turned around and sustained the unanimous rule and the appointment was not made.

Thus far, we have no students at least up till this point at our faculty

meetings. But this is a very important issue with our students right now. In some cases, Harvard and Yale Law Schools, for example, students have been permitted to attend faculty meetings on a selective basis. I am informed that next week the students will organize and will try to enter our faculty meeting.

Just before coming here today, I was working with a committee, one you will hear about often on University campuses called the Committee on Instruction -- a key committee in the faculty. We also have an Advisory Committee that takes all of the important policy committees and policy questions and tries to develop policy statements for submission to the faculty.

Of all of our committees in the Law School, with the exception of the Appointments Committee, we have voting student members. Our Appointments Committee has consultant student members; and, therefore, our students participate in all policy decisions. Furthermore, on application, if a report of a committee is coming up to which students disagree, they may attend faculty meetings and at least argue their position before the entire faculty.

Our faculty has other committees, such as the Appointments Committee, that meet about once a week for consideration of new appointments. The Advisory Committee meets once a week now and with student members for about two hours. We also have a Curriculum Committee that meets not quite as often, but is constantly working on courses of study, on revising content, and on planning with me the offerings for the following year. Then, we have an Admissions and Financial Aid Committee which is today, at least in the Law School, a very important committee because that is where the main pressure is coming from Black students.

You may be interested to know that thirty percent of the financial aid, which is a very substantial sum of money, is going to the black students in the Law School, although they represent only about 3 percent of the student body. We have a little over 10 percent of the student body that are minority students: Puerto Ricans, American Indians, and Blacks. We are beginning to refer to them now as "Black and Brown," not to be confused with "B & B."

We have a Graduate Committee that considers all graduate applications and also policy decisions pertaining to courses of study. This committee meets very regularly and reviews each application of students from abroad. It also determines whether or not a student is qualified to take an S.J.D.. In so doing, the Committee may admit an applicant to the L.L.M. degree program but not to the S.J.D.

At the risk of taking too much time, I want to state that our main problem in the Law School is how we are handling our students. Tomorrow, for example, we are deliberating again the question whether there is adequate student representation on our several committees. Students want equal representation which means they would have as many voting members as the faculty has. I am proposing that representation be from each class, meaning that there would be three students. Fortunately, it is the first year class that is rebelling inasmuch as the second and third year classes have all the representation.

The entire curriculum of the Law School is presently under intensive study and change because of the fact that our students say it is not relevant. We are in a period of great change; therefore, the curriculum content needs major surgery.

As a Dean, I have had to face up to this problem because only recently I wrote a report for the establishment of a Law School in Hawaii, on what kind of law school I would recommend to be established. At this point, I found it a very difficult assignment to prepare because, in the older law schools in this country, we have a traditional curriculum, a traditional approach, and we have very deep vested interests that are almost impossible to change; but they are definitely changing. I went later to talk about it further, but I think we may be coming to the point where we will have a two-year curriculum for students instead of a three-year curriculum.

The immediate battle will be whether we are going to have more clinical work. I do not like the use of the term "clinical" in so far as the law schools are concerned. I wish we could drop it, but students like to use the term. It

where they actually carry on legal work and get credit for it. This, to me, is not desirable because I happen to have practiced law myself and, therefore, I have an appreciation of what legal practice really is like. Some of the younger professors, who have not practiced law do not know and, therefore, they are misdirected by this "clinical" practicing idea. I like to be more theoretical, frankly.

If I had my way, I would prefer to get the students out of school more quickly, and then let the lawyers do the kind of practical training that they are better qualified to do than the kind of professors we can get who will teach a method. This is indicative of the nature of debate that is going on in legal education.

Let me mention, so there will be no confusion later on, that each of the professional schools represented by a dean around this table uses a nationally administered admissions test. These tests are specifically designed for the kinds of professional study to which the candidate seeks admission.

The Legal Aptitude Test, that I mentioned earlier, is periodically improved. While it is prepared and administered by Educational Testing Service, it is revised with the advisory assistance of law school professors as well as experts in test manufacturing. Dean Hanassy of the School of Engineering and Applied Sciences uses admissions tests very much like the ones used by Columbia College, if not indeed exactly the same. Dean Robey of the Graduate School of Arts and Sciences, on the other hand, employs the Graduate Record Examination for applicants seeking admission to the Doctorate in Philosophy. This examination is also nationally administered, standardized on the national population, and revised each year in accordance with the experience of previous years.

Now we do not have to deal here with the fact that there are tests for specific purposes, but perhaps a comment should be made about how significant the test score is together with the grades and recommendations an applicant presents from former schools in his admissions process.

HENNESSY

Our School of Engineering and Applied Sciences is perhaps unlike the vast majority of engineering schools in the United States. Most U.S. engineering schools have their origins in the Land Grant Colleges that developed in large numbers after our Civil War in the 1860s, when the emphases were agriculture and mechanic arts, a highly utilitarian form of education at the time.

The Engineering School of Columbia had its philosophical origin, if you will, in the tradition of the Polytechnic in Paris; and, from its very beginnings, the school had in its program a very strong scientific bent. This heritage is reflected even today in the composition of our faculty.

It may be of interest for you to know that only slightly more than half of our faculty hold their degrees in engineering. A large number have had their preparation in mathematics, physics, chemistry, and a small number in fields such as economics.

We are a relatively small sized school in terms of the typical school of engineering in the U.S. Currently, there are about 1,500 students: 600 undergraduate and 1,000 graduate students.

We offer a degree in engineering at the baccalaureate and master's degree levels as well as courses work beyond the master's degree. Then, an engineering student at the advanced level has the choice of either the doctor of philosophy or the doctor of engineering degree. The requirements for these two degrees are identical.

Dr. Berg in his earlier remarks referred to the Doctor of Philosophy as the shining jewel, I believe that was his terminology, among the degrees that Columbia offers. If so, we in the School of Engineering would suggest that as a matter of taste or convenience one might call the Ph.D. a diamond. Then we might think of our Doctor of Engineering Science as a Star Sapphire. The choice of degree is often made by the individual student. It is his choice to make on the basis of which degree he thinks is most appropriate in terms of his anticipated professional

Characteristically, our foreign students select the Ph.D. because it is more generally known throughout the world. Our American students, who plan to go into teaching, will often elect the Ph.D. American engineering students, however, who expect to enter into professional engineering work in this country will just as often elect to take the Doctor of Engineering Science.

The great increase in the number of American students who elect to take the Doctorate in Engineering has been one of the most striking situations in American engineering education in the past decade. The numbers have multiplied many fold. Twenty years ago, about 500 doctorates in engineering were awarded annually in the United States. We are now approaching the figure of 7000 engineering doctorates annually.

Our school offers the traditional fields of engineering: chemical, civil, electrical, industrial, mechanical, and reflecting our origins, mining, metallurgical, and mineral engineering. Engineering schools in the United States have suffered, as have we, in the past twenty years in decreasing enrollments, despite the fact that we are all caught up in technological innovations.

ROBEY

In the United States the traditional goal of undergraduate education has been liberal studies in the arts and science. With the birth of graduate education in this country, the traditional goal has been a complementary program that promoted scholarship in a discipline, a discriminating judgment, and creative research.

Here at Columbia in our Graduate School of Arts and Sciences on completion of approximately two years of relatively formal course work, the student engages in full time research. Under the direction of a faculty member, or a group of faculty members, in his special field of interest. That period of research and the writing up of that research in a dissertation may take anywhere from one to a dozen years. We have been moving lately to a recognition of the fact that there is very little to be gained from the traditional impetuosity -- the extra long period of time in this kind of study. In fact, we now expect all graduate students to

complete the Ph.D. degree program within seven years of their entrance. But the time for research study is unstructured in that there is no regular class movement through the degree after all course work is completed.

After their formal course work is completed, our students have very little sense of identity within a division of the University, but rather with their own specific research interests which generally keep them in a library, or a laboratory, or very often in another country for a number of years. Consequently, the Graduate School of Arts and Sciences as a physical entity is much less present than most other divisions of this University.

The departmental size varies from department to department. Some have approximately twenty students in all phases of study to very large departments which will have about 400 graduate students in various stages of study. Among our largest departments are literature, government, and history. Our smaller departments obviously would be mathematical statistics, East Asian languages, and so on.

Our students are selected from all over the world on our estimation of their ability to complete successfully their independent research. We play with examination results in that we also recognize the importance of undergraduate records, letters of recommendation, and the student's own statement of professional goal. Finally, the most significant selection factor has always been the student's choosing us.

Most American universities and most parts of Columbia University translate the number of hours a student spends in the classroom into an equivalent number of points. The usual equation is as follows: if the student meets three hours in a classroom each week throughout an entire semester, he earns three points credit. On the graduate level, the student is expected to spend an equivalent or more time outside the classroom in preparing for the course to receive three points credit. Traditionally, five courses per semester was considered the ordinary requirement and the student was required to do four courses

per semester of such course work to meet the requirements for the Ph.D.

Under our system, the student pays a flat rate, an even rate, of \$3,000 for each of three years, and then \$1,000 for each additional year he must be registered to complete his degree requirements. By paying that fee, he takes any number of courses for research work that his department and his adviser feel are appropriate. The movement away from the point system was to allow the individual departments to develop a more flexible curriculum without the rules that are usually arbitrary.

I should close these remarks by explaining that elected students serve our Committees on Instruction in two of the three graduate faculties. Pure science does not yet have students representatives. Students are currently asking, and there is very little question that their request will be honored, that their request be honored, that one student from each of the three graduate faculties serve on the eleven-man joint Committee on Graduates.

DISCUSSION ON EDUCATION AND GIFTED: THE APPROACHES OF

#6. ITALY - Italy and the United States

In a lecture given by Professor Roberto Bernardini on the occasion of the 150th anniversary celebration of the founding of the Scuola Normale Superiore (Lise), he said:

We are gathered here today to remember a past which is part of the history of Italy and an essential part of the personality of anyone who has had the privilege of studying here at the Scuola Normale or at Pisa University. I mention the school and the University together because I believe they have in fact worked together for more than a century. Throughout that time students at the school have had Pisa University professors as their teachers, and Pisa University has recruited from the Normale many of the teachers who made it one of the greatest centers of modern European culture.

1. Perspectives

In a discussion of modern Italy and its methods of identifying, attracting and teaching the exceptionally gifted, the reader should know something more about the origin and task of this famous school. It is an old institution that was founded by Napoleon in 1813 as a "branch" of the Imperial school of Paris and a part of the rigid Napoleonic University system. The school's initial function was to produce teachers for all European countries in the Napoleonic empire where the Italian language was permitted. With the school's becoming a national and independent body (Law and Decree of 1822), its prestige rose and it began to play an important role in Italian society, and to make a decisive contribution to the development of a "century of science." Featured prominently in this era of great scientific advancement (mostly in mathematical physics) were such distinguished Scuola Normale graduates and teachers as Ottaviano Mossotti, Giosue Carducci, Vito Volterra, Ulisse Dini, Eugenio Bertini and Enrico Fermi (the greatest), who opened new horizons in human knowledge and human potential.

*The following statement is a condensation of a prepared address, delivered by Professor Rolando Anzilotti in Seminar I, Dialogue 4, and of the remarks made by American respondents who spoke extemporaneously during the discussion period on American approaches to educating gifted students.

1. The Current Scene

In Italy today, the identification of exceptionally gifted students occurs on two occasions: 1) the moment of his enrollment in a university and in a program of study he has chosen, and 2) the time of his decision to continue at the university with advanced study and research after graduation.

First, let us look at the flow of young people in Italy, about 130,000 in number, who enrolled as freshmen in the academic year 1964-71 (the number of freshmen in 1964-65 numbered 136,722).

As stated, a natural selection has taken place when these young people received their higher secondary school diploma. So much depended on the type of school each attended. The greater or lesser degree of brilliance with which a student has passed his final examinations for the diploma constitutes the index not only of his academic preparation but also of his capabilities.

When a student enrolls in the university, his secondary school grades as well as his perseverance and ability are clearly reflected in his graduation record (anyone who holds a secondary school diploma is eligible to enroll in any university, large or small, in the Italian Republic). Attracting the best secondary school students, who desire to undertake their studies in a university known internationally for its modern scientific preparation, is the on-going task that the Higher Normal School of Pisa (Scuola Normale Superiore di Pisa) sets for itself.

The fundamental purpose of this school is to prepare teachers and researchers in the humanistic and scientific disciplines by offering carefully selected young people the opportunity for study in a quality program that is comparable to that provided by the École Normale Supérieure of Paris and certain equally famous

single-sexon colleges. Students on admission are assigned a college room for men and the other for women and, for the duration of their studies, they enjoy free food, lodging and medical care as well as a small financial contribution for materials.

The Normal School offers a choice of two study programs: 1) letters and philosophy, and 2) the mathematical, physical and natural sciences. All students enroll in the courses offered by the Facoltà of Letters and of Sciences at the University of Pisa, but supplement them for purposes of enrichment with courses given by professors at the School or by the more advanced students. In seminars they take part in intensive research activity with the collaboration of the Facoltà of the University of Pisa and from other Italian and foreign universities. In this way students become intimately acquainted with the most advanced problems and issues; and, from their association with university professors, lecturers and distinguished guest scholars, they draw stimulation to broaden and deepen their own preparation.

Students are admitted to the Normal School of Pisa only if they have passed a national competitive examination, consisting of written and oral sections that are designed to reveal a student's capability. That is, students are accepted only on the basis of merit; and merit, together with personal conduct, is the sole condition for keeping their places in the School until graduation (each student must maintain an average of 27 out of a possible 30 on all examinations taken). Thus, while the selection of exceptionally gifted students is carried out among Italian youth, admission is granted only to those who want and decide to take the competitive examinations.

For a number of years, the Normal School of Pisa organized and taught special courses as preparation for the national examination. Graduates of Italian secondary schools nationwide attended these courses at Pisa in Sicily. This year (1970) from the end of August to the first of October about 120 young people already chosen on the basis of their school records, attended these courses and were acquainted with the various kinds of research they might follow in the university.

The Normal School of Pisa is the only institution of its kind in Italy. Its prestige stems from its age, its traditions, its excellence in teaching, and its achievements in research. The School's limitations lie by statute in the small number of academic disciplines taught. Thus, the School attracts only those gifted students whose primary interests and abilities are in philosophy, mathematics or the sciences.

The recent establishment (1967) of the Pisa Higher School of University Studies and Specialization (Scuola Superiore di Studi Universitari e di Perfezionamento di Pisa) has made up, to a considerable degree, for the statutory limitations of the Normal School. Now, by means of annual, national competitions, this School admits, in separate sections, students of both sexes in the fields of law, political science, economics and commerce, medicine, engineering and agriculture. This School's announced goals are essentially the same as those of the Normal School, although in a more modern framework. Continuing and incorporating the traditions of the Law College, founded in 1231, the Medical College, founded in 1233, and the Applied Sciences College founded in 1451, this new School completes the range of possibilities for the circulation and

preparation of young people planning careers in teaching and scientific research. Here again, admission to this school depends upon one's placement in a national merit competition.

The goals of other Italian university-level colleges, which also select their students and aim at the promotion of scientific culture, are different. In Pavia, for example, the Borromeo and Ghislieri Colleges (Collegio Borromeo and Collegio Ghislieri), founded in the 15th's have so far primarily limited admissions to deserving students from poor families in the province of Lombardy. Students who are admitted attend the various facoltà of the University of Pavia.

The Borromeo College, founded on the idea of religious and cultural perfection of St. Carlo Borromeo, today serves 21 male university students. The admissions competition (strictly on the basis of records and examinations) for this academic year is severe in that only 25 places were provided (23 for boys residing in Lombardy and five for the rest of Italy). Titles of preference, over and above good grades in the entrance examinations, were economic conditions and good moral and religious conduct. Thus, it is fitting to note that here is a private institution which carries out its selection process among gifted students in need of financial assistance to obtain their university degrees for primarily welfare-oriented motives and for a particular sector of the Italian population.

The Ghislieri College, founded in 1567 by St. Pius V (Antonio Michele Ghislieri) now accommodates more than a hundred students, with male and female components (Sancta 3-unit Foundation). The admissions competition of 1965-71 provided 22 places for boys (of which 13 are reserved for the provinces of Lombardy or Alessandria) and 11 places for girls from all parts of Italy. A basic requirement for participa-

tion in the examining room for admission is the demonstration of need for financial assistance. Selection is then made on the basis of merit among those who have distinguished themselves in their studies.

In the Ghislieri College, students also have supplementary instruction; that is, they attend seminars, lectures and special courses in addition to their studies at the University of Padua. An atmosphere of stimulation and reinforcement of individual studies is thus created. The effect of this supplementary instruction is to develop and reveal the most gifted, who may then be permitted to retain their places in the College even after graduation in order to continue their specialization or to receive scholarships for study at foreign university centers. One may, therefore, say that the Ghislieri College sets two goals for itself: 1) in the field of welfare, and 2) in the scientific advancement of gifted students, although basically limited to one geographical section of Italy.

At this point, one may be inclined to draw some conclusions. Based upon the number of students encompassed by the various programs described, a relatively small number of gifted students in Italy may, by means of national competition, enjoy special conditions of study and residence within a university, and, thus, reinforce, develop and stimulate their capacities while preparing for careers in scientific research or the advanced level of teaching.

How many of these exceptionally gifted students are admitted each year? In 1967-68, the Normal School of Pisa admitted 22 students to the Class of Letters

and 12 to the *Class of Sciences* (totaling 24 in all). The *Liceo* (High School of University Studies and Specialization) admitted 24 in all. If the *Mediocr College* is included, there would be an additional 12 students, for an over-all total of 147 students enrolled.

One naturally asks: "How does all the gifted students in Italy, in one academic year?" The answer is "Certainly no." It should be remembered that the places available in the *Normal School of Liceo* (as in the *Mediocr College*) are necessarily limited in number by reasons of finance and space. Obviously many excellent students are left out. Despite consistent national effort, to inform all potentially interested students, some do not know of the opportunity. There are others who do not desire to undergo the severe screening procedure or who by personal inclination prefer to follow collegiate study on their own.

Another cogent question we ask ourselves is "Can Italy be sure that the current competitive examinations are capable of revealing the truly most gifted students?" and this question poses still another: "Would it not be better if Italy adopted a national system of selection (similar to the *Merit Scholarship* system in the U.S.), based upon tests that evaluate intelligence quantitatively?" While we wait for answers to these crucial questions, it is certain that students already selected are enjoying the advantages provided them. They live, study and learn together in an atmosphere that is conducive to scholarship and research.

We now come to that second moment of identification of gifted students--the time in which they acquire their degrees.

Without doubt, the university degree is in itself a justification and mark of merit: so it is on the basis of this consideration that the Pisa Normal School and the Higher School of the University Studies and Specialization accept, for two or even three years of graduate study, those students who warrant encouragement to undertake advanced study or to do research in areas

selected by themselves or jointly with their teachers. In 1969-70, there were 20 students who were approved for advanced study at the Normal School and three at the Higher School. Here again, selection was made on the basis of competition for the very limited number of places.

It should be pointed out that the Galilei College also provides its best graduates with the possibility of continuing their studies on a yearly basis (five students in 1969-70); but the places made available to young people by these institutional progress are too few--too few in light of the number who have shown themselves to possess singular talent, and too few in respect to the urgency for employing such a reservoir of intelligence to the benefit of Italy.

To overcome this deficiency in established programs as well as to give all deserving students the possibility of developing their talents, a law has recently been enacted (1967) that provides for a number of annual scholarships (renewable for a second year) for young graduate students. The new statute, it seems, merely enhances the traditional mode of selecting of gifted students at the graduate level.

Each year about 1,350 scholarships are made available, through competition, by the various universities and the Ministry of Education. These stipends are reserved to those university graduates (within three years of acquiring the first

earned degree). He intends to do research within an Italian university under the guidance of a professor. Merit is the only criterion for obtaining one of these scholarships. Factors currently considered are these: 1) the work presented as a graduation thesis, 2) the student's undergraduate grades, 3) possible publications, and 4) the judgment of the full professor under whom the candidate intends to carry out his research.

It is this speaker's considered opinion that the future of any nation or of any social group depends to a large degree upon the percentage of gifted young people who have been able to develop their talents. Accordingly, the importance of educating the exceptionally gifted students cannot be ignored.

Selective recruitment of the potentially most talented young people in Italy is still only partially solved. The entire system for attracting, selecting and nurturing these students must be up-dated and expanded to permit a screening of the nation's entire scholastic population. An increased number of places of the sort described should be made available promptly.

Similarly, the retention of gifted young people, who have completed undergraduate programs, is more easily resolved--indeed a solution has already begun. The gifted individuals at this level are already at hand and the avenues to reinforce and develop further their talents are well established. What is required are vast sums to expand the program to more reasonable proportions.

3. Respondents' Statements*

My comments are on two related matters that have to do with diverse American practices in dealing with the Gifted; and, then, on a few of the important issues that stem from these practices.

In the United States there have been certain well known public secondary schools that have catered to the needs of able students. These schools include the Boston Latin School and the Bronx High School of Science and the High School of the Performing Arts, the two latter being in the City of New York. In fact one could name one or more high schools in nearly every major city in the U.S. that have at some time attracted faculty and students of rare intellect or talent. While these schools have been a source of civic pride, they have more recently been the targets of complaint because they have received a greater share of the financial resources of the community.

If one were to visit every smaller city or suburb in America, where there are, let us say, three secondary schools, he would probably find one of these three schools located in the wealthy residential area. That school would probably have a better faculty, more financial support, greater instructional resources, and a higher quality of instructional program than the other two.

* Here in capsule form are the statements of two respondents 1) Dean Milton Schwebel, and 2) Professor Jane Raph, who cited a few of the marked differences that exist between Italy and the U.S. in educating gifted students. The Conference of Rectors delegates entered the discussion during the open forum.

Obviously, the situation I have described has engendered considerable bitterness; and, as a result, there have come into being across the United States a number of programs to compensate for the failure of the public schools to achieve true equality in education.

Presently, we have a number of school patterns that are directed toward giving quality instruction to children in lower socio-economic status, both black and white, who have been identified as talented.

How do we in America identify giftedness? Our methods are quite unlike those just described for Italy. Indicators of high scholastic ability are represented by students' I.Q. test scores, by their school grades, and their performance on standardized achievement tests. In general, the ratio of gifted students is positively related to a school district's per pupil expenditure for education--a situation that is of great concern both to those in the lower classes and to educators who question that such a relationship is predetermined by nature, that is, by the genes.

In our largest urban school system in New Jersey, namely Newark, the largest portion of whose students are black, there is a school-within-a-school arrangement, designed for the more able children. Here students receive considerable individual attention in and out of their classes and they are given much professional guidance in planning continuity from secondary school to college.

American higher education has attuned itself to social change and even the more prestigious colleges and universities have demonstrated effective devices for recruiting talented and potentially able Negro students. Another device in current use is to admit students to college before graduation from high school who show exceptional achievement in a specific subject, or exceptional motivation in spite of severe financial disadvantages. By this arrangement, instead of entering college say, at 18 years after finishing four years in secondary school, he goes

to college at 16 after having finished two years, or at age 17, after finishing three years.

There is some research to show that these students as a group maintain high grades in college and obtain more artistic accomplishments than other students. Likewise, there is some evidence to suggest that these students create none of the awful consequences that some critics have predicted and that they are able to deal with the problems of social adjustment.

A second device presently in universal practice is known as "advanced placement." Under this arrangement, the student enters college after four years of high school; and, on reentering, he takes a battery of placement examinations. On the basis of his performance, he may actually move in at what is really the second year of college, rather than the first; or he may be placed in advanced courses in a subject field, enabling him to avoid duplication and to advance further in a field of study.

A third device that is in widespread use in American higher education is to provide for enrichment for more able students in what is known as "honors programs." Students are usually elected to membership in honors programs by faculty action and they study independently under the guidance of their major professors in the preparation of a thesis or major papers.

It is fitting to note that the chief way in which the U.S. responds to the special needs of the more able students is by the marked differences amongst the hundreds of colleges throughout the nation. It is a fact that college preferences of very able students are related to institutional "popularity," with popularity most closely related to the size of the institution, and with private universities being the most selective types.

Of course, these "best" universities--the Harvards, Yales, Princetons, Stanfords, with Rutgers not too far down the list--also attract the best faculties; and, because they also have the most money, they have the best libraries, laboratories, materials, and scholarships.

In the U.S., we also provide for students from the lower socio-economic classes by offering various kinds of student scholarships, fellowships and loans. A variety of these aids were first introduced during the depression years of the 1930's. Immediately after W.W.II, an extensive boost in support for college students was given through the "G.I.Bill," and a little more than a decade later, after Sputnik, under the National Defense Education Act increased support was given to mathematics, the sciences and modern languages.

In America, we are increasingly concerned with conserving our intellectual resources. About fifty years ago, educators began to explore ways to identify and nurture such resources. When the famous psychologist Terman launched his classic studies, starting in the 1920's, the impression was widespread that gifted students were easily recognized. Why? Because Terman believed that gifted persons and all good qualities appertaining tended to go together, such as high intellect, social adjustment, and physical development. In fact, studies were so designed that there were controls for social class, for nationality, and for religion. Subsequently, it became apparent that the assumption was not a valid one, namely, that gifted students were not primarily in the middle classes, that they were not primarily white Anglo-Saxon Protestants, and that their appearances were not an identifying factor. Consequently, it was generally agreed among educators that there was only

one route to follow: to provide "all the children of all the people" with high quality education, starting at a very early age. For this reason the issue is often raised: Should we have quality or equality of education? This issue is indeed an artificial one because, if we are not to be wasteful, these two must not be seen as dichotomies, and equality must be achieved without loss of quality, difficult as that may be.

Another important issue in the American educational scene may be framed as a question: "What is the criterion of giftedness?" Terman used the I.Q. test to obtain the "G" or General Factor, the general quality of mental capacity--a rather unitary thing that applies to many activities of man. Of the 1,500 young people Terman identified as gifted and subsequently studied for some 40 years, only a few were found to be highly creative as adults. What does this mean? One explanation may be that we had been defining giftedness inappropriately. Perhaps one way to define giftedness would be to place greater emphasis on creativity.

The American psychologist Guilford refers to five different operations, each a component of intelligence. He claims that in testing, selecting and teaching gifted students, we have failed to recognize two of them. The two missing components are what Guilford called a) "divergent thinking"--independent or creative thinking, and b) "evaluative thinking"--the operation of making judgments or decisions. There has been much interest in the U.S. during the past decade in this field of research.

The current trend in our modern secondary schools is toward heterogeneous student grouping, with an accent on individual assistance where needed. Experience seems to show that the gifted students, as well as the average, advance more readily than when they were isolated under arbitrary administrative arrangements. The effect of heterogeneous grouping suggests these two possibilities: a) that the prestige institutions in America have served as the model for what is excellence in education represents, or b) that a new and better organizational arrangement would be heterogeneous groupings of students--the gifted with average students in the same class.

One other matter of concern stems from theories like Guilford's, namely an interest in more effective teaching--teaching that brings into being divergent thinking. The effect is to create student activity and involvement as well as a climate that do not encourage passivity in the classroom. This trend may not be a major one at this time. Too many of our colleagues in teaching cling desperately to the traditional methods of imparting knowledge, especially through the lecture and textbook, encouraging rote learning and memorization in general rather than critical appraisal and divergent thinking and reinforcing an implicit high value upon accepted views in a given field, by the method of examining and testing and by the institution's reward system. This widespread practice raises a major agenda for another conference.

THE ROLE OF TEACHERS COLLEGE IN THE PREPARATION OF TEACHERS*

FISCHER

First, I think I should tell you that our name (Teachers College) is misleading. You may understand our function much better if you think of us as the graduate school of education at Columbia University. We are the university's faculty of education.

All of the students who come to Teachers College have earned their bachelor's degrees before they join us. Their purpose in coming here may be to prepare for teaching at the elementary (primary) or secondary school levels, for college teaching, or for advanced studies leading to lower school or university administrative assignments. In addition, there may be others here who are preparing for work as specialists in any one of the many areas of education--psychological studies in education, in the philosophy of education or related foundational fields, in behavioral sciences in education, et cetera. Other students specialize in the various problems of the social sciences (you perhaps refer to them as the human sciences) as they relate to education.

Some students here are concerned mainly with problems of adult education; some students specialize in problems of pedagogy; and some are attempting to meet the requirements to teach mathematics, the sciences, history, a foreign language, et cetera. And then, we have a rather unusual division which deals

*President and Mr. John H. Fischer hosted a reception and luncheon at the President's Residence, in honor of the Italian University Rectors. This is a condensation of the dialogue which took place in the living room, prior to the luncheon, April 10, 1970.

with nursing education. All of the students in this division come to us prepared and certified as nurses. They study with us in order to prepare for eligibility as teachers in nursing schools or as directors of nursing services.

Our offerings at Teachers College consist not only of teaching but also of research. Our professors are involved in research as much as they are involved in teaching. They also work quite actively in service programs in schools and universities actively assisting administrators and teachers in those schools with practical problems.

Let me say something about the size of Teachers College. We currently have about 5,200 students, with approximately 33-40 per cent studying full time and the remainder spending part of their time studying with us, while they spend the rest of their time as teachers or administrators in area school systems.

Our faculty at Teachers College consists of approximately 200 persons of professional rank--e.g., lecturers, instructors, coadjutant, etc.

Our students' average age is about 29 years. Many of them are young people who come to us immediately upon completing their undergraduate studies; but others come here after 3-5-10 or more years of teaching experience to spend 1-2-3 years in advanced studies preparing for more responsible professional assignments.

In summary of what was said, Teachers College is the largest graduate school of education in the United States and we are the most diversified. We offer

a greater range of specialities in education than any other graduate school or undergraduate school in the United States.

FAEDO

It is very important for us Italians to hear your description of Teachers College and to learn about the program in preparing personnel for teaching in the primary as well as secondary and higher levels.

Italy has a very serious problem not only with regard to the preparation of teachers and professors, but also with regard to the fact that after World War II there was a very acute shortage of teachers. Italy found herself in a most unprepared situation in the sense that it was difficult to prepare competent teachers in the supply demanded.

Might we discuss now or during luncheon what is happening in the United States to meet a similar problem? You have given us the appetite for closer scrutiny...One of my colleagues, closely identified with teacher education in Italy, has a question to pose.

MADIA

My question has to do with the preparation of teachers for the primary level which is of considerable interest to us from Italy because of our supply factors.

We prepare such teachers in a special institution of the lyceum type or high school. There are currently some projections of a reform, an extension of the university for preparing teachers for the primary school level, so that primary and secondary school teachers would have equal preparation and of the same duration.

I would like to know whether elementary and secondary school teachers in America have comparable training; and, if so, whether the leveling of requirements does not create a problem for tomorrow?

Phrased differently, is there not a tendency here on the part of beginning teachers to seek secondary school assignments rather than the less prestigious and poorer paying placements in the elementary school?

FISCHER

Let me ask one of my colleagues to comment on these questions. I will turn to Professor Passow, who is Chairman of our Department of Curriculum and Teaching, where classroom teachers receive their pre-service preparation. I will ask him to comment on the similarities and differences between the preparation of elementary and secondary school teachers in the United States and also to comment on the question whether our system has created shortages in the elementary schools.

PASSOW

In past years, my guess would be that the bulk of the secondary school teachers had a lot more work in the subject discipline they were preparing to teach.

If one is going to teach high school mathematics today, he must study it in depth. The duration is relatively the same nationwide. All fifty states require at least four years of careful subject-matter preparation for the baccalaureate degree, and in many instances a fifth year of master's level work.

There is no difference in the length of time needed to prepare for elementary or secondary school teaching. The difference is only in the nature of the subjects which are studied. In most of the states and in most of our cities, we have a single salary schedule for primary and secondary school teachers for both men and women. There is no differential.

Whether a teacher is attracted to primary or secondary school teaching depends very much on the perceptions of each of these and on the status that goes with it; the same salary scale and the same length of preparation.

ROLLA

You mentioned that Teachers college prepares school, college and university administrators. I would be interested in learning whether students for this program are recruited from the rank of classroom teachers? And then also, I would like to know whether there are specific courses or programs at the university level for the preparation of school superintendents, inspectors and university management personnel?

FISCHER

Let me respond to these questions by telling you the story of my life.

I began my teaching career as a primary school teacher. This was forty years ago, when it was possible to begin teaching in the primary schools after only two years of training beyond the high school.

As I continued as a classroom teacher, I also enrolled part time as a university student. In about three years, I became a teacher in a junior high school. I continued my studies, all this time, while teaching and I became

first the assistant principal of a junior high school and later the principal. I went from that position into central administration of my city, Baltimore, and as the director of one of the services of the school system. In my case, it was called "Special Services", including school social work, guidance, counselling and testing. From that position, I later became an assistant superintendent for general administration which had to do with financial affairs, personnel management and so on. Eventually, I became the superintendent of the entire school system.

I cite my case only because it is fairly typical. Many American school administrators came through this same process and experience into administrative positions.

ROLLA

Don't you think that the kind of position a classroom teacher holds and that of the superintendent or inspector are qualitatively different?

The teacher, according to your statement, requires courses in pedagogy, while in the other position it is necessary, in my judgment, to have ability as well as broad preparation of a managerial nature.

FISCHER

I should have mentioned that in the course of my university studies, I came here to Teachers College, Columbia to take my Ph.D. in educational administration; and I became, at least to some extent, a specialist in the problems of administration. We have here a Department of Educational Administration. We also have a Department of Higher and Adult Education, in which we prepare administrators for university positions, and specialists in the problems of adult education.

KNOX

In our department, there are graduate students, working for master's degrees or for doctorates who plan to be administrators in higher education as deans, directors and presidents, particularly of two-year community colleges, as well as of colleges and universities. In addition, almost all types of organizations in this country--employers, schools, colleges, universities, professional associations, and government agencies--have a unit as a part of the organization which is concerned with education or training of personnel. Thus, a college may have an evening division, where adults of the community may come to study part-time either for a degree, or in many instances completely aside from the regular credit and degree structure of the college.

Most public school systems have an adult education division; and many private colleges have education and training departments in which employees may increase their competencies to do the work they are doing at the present time, or to move into positions of higher responsibility. So, the other part of our Department prepares people to develop and administer these types of continuing education programs in the whole range of agencies, not just the schools and educational institutions that sponsor educational training programs for adults.

MADIA

How do you recruit students for primary and secondary education programs? Is there a sort of competition? Once they are enrolled how does one become a teacher?

FISCHER

I shall ask Professor Goldberg to comment on these questions: a) how does a young person decide to become a primary teacher, or b) a secondary teacher.

GOLDBERG

I think many young people decide long in advance in terms of where their own bent is.

In many of our American colleges, students interested in secondary education take the same basic program in general education in the first two years in their college training. Then, in the last two years, they decide themselves which direction they want to go. Very often young people who have a special interest in a particular subject, such as mathematics, science, art or literature will go into secondary education. On the other hand, those who are more interested in younger children and in working with them will go into elementary education. It is a self-selection process, not one in which there is any contest or any selective process.

PASSOW

In each of the fifty American states, the state education authority is responsible for licensing. No person may teach in a public school system without a legal certificate. So, anyone who desires to teach in the schools of New York or New Jersey, for example, must obtain his credential from the State Education Department, qualifying him as a teacher of primary schools, or of mathematics at the secondary level, or whatever his specialty may be. Only when that person has that license or certificate may he apply to a local school district for employment. A certificate is not required for teaching in a junior (community) college in most states.

Now, there were and still are emergency conditions under which temporary arrangements may be made but only when acute shortages of teachers in certain fields exist. So, the standard procedure is to employ only fully certified teachers in the public schools. In America, a teacher is licensed by the state, but he is an employee of the local school system only; he is not a state employee.

PRINJ

When a teacher receives a certificate from the State of New Jersey, is it recognized by all the states in the U.S.? Or, if he wants to teach in another state where reciprocity does not apply, must he pass a second examination in order to obtain a valid credential?

GOLDBERG

This varies. In some cases, states have compacts under which a license issued by one state will be honored by another, but, unless a reciprocal agreement has been entered into, it would be necessary for a teacher to obtain a license in the state in which he wishes to teach.

FISCHER

You might mention that the licensing generally is not by examination but rather by fulfilling certain educational requirements which the several states set forth: a prescribed number of credit hours in one subject, supervised practice teaching, and so on. Only a very few states persist in using examinations, but for the majority there is no examination.

The usual procedure is as follows: the N.Y. State Education Department has designated Teachers College as an approved teacher education agency and will issue teacher's certificates to such graduates of Teachers College as may be recommended by the faculty.

GOLOSBERG

Programs in teacher education nation-wide are remarkably similar. When a teacher moves from one state to another and fails to meet in full all requirements to certify, permission is frequently given to teach for a specified period of time so he may fulfill the additional legal requirements. Thus, he will not be excluded from teaching. It is fitting, however, to note that reciprocity in teacher certification is expanding among the fifty states.

ERMINI

What are the usual requirements for the secondary school teaching certificate in the U. S.?

FISCHER

Let me refer this question to Professor Vogali, who works specifically with the preparation of teachers of mathematics for secondary schools.

VOGALI

We require the completion of a major and a minor in specific course requirements. Most states require a minimum of at least thirty credit hours in mathematics; usually one general course in psychology; a developmental course in psychology; one or more special methods courses in the teaching of mathematics, where not only didactic methods in mathematics are given but also specific types of experimental curricula are examined in detail.

FISCHER

To give you some idea of the proportion that is academic content and that which is specifically pedagogical, let me point out that about 124 credit hours are usually required for a baccalaureate degree, or four years

of collegiate work, at least 100 hours of which are in academic subjects and the remainder are specifically pedagogical, including independent practice teaching under supervision.

FLORIDI

A couple of years ago we took constructive steps in Italy to improve the competencies of teachers in the natural sciences. Therefore, the information you have given us today will be most useful. In fact, it stimulates us to return to Italy to continue our efforts. We encountered some difficulty in gaining acceptance of the idea that a college is intended to teach teachers how to teach, rather than only to provide teachers with academic content.

PASSOW

We are not without experience in this country in difference of opinion between specialists in academic fields and people interested in pedagogy.

There was a time when it was possible for a person to become a teacher at a secondary school in the U.S. with no training in pedagogy at all. This has changed over the last two generations, so that teachers in secondary schools are now required throughout the country to have some preparation in pedagogy. But there are still specialists in various disciplines who remain unconvinced that training of this sort is necessary. The difference I think between those who see value in pedagogical preparation and those who see no value in it may very well be summarized in this way: When it is possible to admit to a school and to retain in that school only pupils who can succeed

with the teachers who are there, when it is possible to reject the students whom that teacher is unable to teach, then training in pedagogy seems relatively unimportant. But once a society commits itself to teach all its children and to find ways to instruct those whom in the past nobody has worried about very much, then training in pedagogy becomes very much more important.

Under our older system in which we kept in the schools only those children who could learn easily under the instruction of the teachers who were there and when it was possible to reject those who did not learn easily, the luxury of that large number of rejections could be accepted in society. But now, when education becomes more and more important for the entire population, we can no longer continue to be satisfied with only the old art of teaching. Now we must discover new ways to teach those elements of the population whom heretofore we were able to pass by. And so pedagogy is much more important today than it has been in the past in the U.S., and I would suppose in Italy, and in any other country. My prediction is that in the future it will become even more important in your country and in ours than ever before.

FLORIDI

Can you give us some idea of the number of teachers in the U. S. teaching at the elementary school level?

FISCHER

Our teacher supply situation has changed markedly within the last two years. Ever since World War I*, we have had a shortage of teachers in the

U. S. We still have some difficulty in filling posts in some cities and in some specialities. We still need more teachers of mathematics and sciences than we have; but, in the primary schools and in many of the secondary specialities, we now have very nearly enough teachers to meet the demand and in some places we have more teachers, more applicants than we need. But this change has come about only within the last two or three years.

Dean Wayland has obtained for us some copies of the catalog of Teachers College. We shall see that each of you has a copy as a permanent summary of the program of the college described here today.

FAEDO

It is very interesting to learn about the role of your school. Unfortunately, we cannot continue our discussion longer. Let me express our most warm-hearted appreciation to you and your associates for the enlightened information we have received today.

FISCHER

Let me say that it has not been only a high honor but very great pleasure for us to have you here today. The only thing that I can say about the brevity of your visit is that because it has been concentrated, we have enjoyed it even more.

IV. THE PRIVATE UNIVERSITY: AN OVERVIEW

DISTINCTIONS BETWEEN PRIVATE AND PUBLIC*

The Theory of the private university in America was perfectly clear until two or three years ago.

In essence, the theory was this: being private and responsible only to its faculty and trustees, the University could carry on innovations and experimental programs; it could select its students for their academic excellence without incurring anything but approval and indeed applause from the entire educational community; and, indeed, it was like a high court -- responsible only to itself and its high principles.

Recently, two great changes have come into American educational life: 1) an influx of money from the Federal and State governments (sometimes also from city or local communities), and 2) widespread student dissatisfaction.

The theory of the private university has been breached. Gradually, it began to break down because the private university, instead of remaining responsible to itself and to its principles, it has become responsible to persons in the community, who have assumed the right to criticize it and to make demands upon it. The demands often have nothing to do with education. For example, requests have been presented that the University become a source of social welfare for the people immediately around it; demands have been made that the University's curriculum be changed to follow some political or social line; and demands have been presented by students that they have a hand in choosing professors, promoting professors, reviewing the budget, and managing many of the units that constitute the University.

I do not say that all these demands have been accepted. I do not say that the University, the old private University, has completely changed. The

*Jacques Barzun, Courtney Brown and Bruce Bassett discuss the major identifying characteristics of a private institution of higher learning and the implications these characteristics for its operation and for its mobilization of human and financial resources.

current situation is a state of confusion-- fluxed--and it is a real question whether the private University, as my colleague Dean Brown and I knew it and took part in administering it, will survive relatively unimpaired.

I should hasten to say that the power to resist attacks depends very much on the quality and temper of the administration, than on the university, be it private or public. Of course, certain tradition-elements play a part in all this. For example, the University of California, which is a public university, has been under various kinds of attack for many years-- from students at first but later from very conservative members of the community expressing themselves through the Board of Regents. So, the University of California has been in one difficulty after another for over ten years. On the other hand, a private university like Yale University in New Haven has managed to resist, fairly successfully, a variety of attacks from radical students on-campus and very conservative trustees and alumni on the other political side. So, here we see diversity and pluralism in American higher education come in. Each institution is probably going to make its own fate.

Perhaps we are talking about a matter which is far more complex than it appears on first examination. There are all kinds of pressures and influences being brought upon the University, which after all, is an open society and indeed invites alternative points of view. We have pressures from students, some of which reflect a shift of emphasis in our general value system, and we have demands that stem from changes in our society itself. Thus, the situation remains chronic.

Many institutions, which we have long thought of as being public, have recognized the importance of having a marginal level of private support, which they use to achieve what has been identified as the "cutting edge." While we are getting this intermixture, public and private institutions, none are totally private and none are totally public. The extent to which we are able to preserve a flow of free resources from private donors, we can protect ourselves against a rapprochement of some factors that extend across the entire spectrum of our

environment. Thank you.

BASSETT

Private universities, at least in the past and generalizing from the Columbia experience report by you by Dean Barzun, the distinction between private and public is quite unclear. Each private university runs the gamut from various degrees of State control or public authority control to what we refer to as private, independent authority. In my experience, private universities have connoted a certain degree of exclusion.

Within Columbia, or within any large institution such as this, the extent of variation in ideals of what a university should be is great. These ideas range from some sort of platonic organization to a kind of utilitarian concept for educating youth. These ideas promote many different stresses and strains and a sort of pluralism within the university and the student body. I think many of the distinctions being advanced are false. One of these is the distinction between "professionalism" and "scholarship." To me, these are not incompatible terms nor are "applied research" and "theoretical research" necessarily incompatible. This situation has produced a variegated body with different ideas, many of which are linked, because of the external pressures on society today, with a common bond that demands more direction from this pluralistic institution. I do not believe there is much consensus as to what that necessarily should be.

Obviously, the situation I have described in which universities perform their functions indicates that they are facing many very serious problems, and I realize that this situation is somewhat inconsistent with the concept presented here by Dean Barzun. He sees the university as the center of various ideas and interests. I sense that students see no direction is being given or being nurtured in a culture that is stabilized by nor institutionalized with democratic values.

Students today feel that they must take a hand in determining the course of the University. The spirit which unites them may be described as when there is power over people, namely the students. The people over whom that power is

being exercised should have a political relationship.

The same sort of feeling is present amongst the faculty. Faculty tactics, however, are quite different; for the tact of the faculty is generally as transient as a student body. Students may be at Columbia for a duration of ten years, counting undergraduate and graduate work. I would imagine that the average faculty tenure is no greater. Faculty members tend to voice their desires not by the overt tactics of the students, but rather by committee action or the threat-of-leaving tactic.

Of late, the faculty is rather passive, self-absorbed, and in many cases perform like business men - somewhat censorious. Those, who have very few alternatives outside for greater remuneration, are much more insistent about ways and means and purpose; whereas, those who do have alternatives, or have the option, choose to go into research, scholarship, or be less absorbed than those who do not have such alternatives.

All of this ferment within the University seems to deposit itself on Administration. The Administration of the University consists of a peculiar breed. Very often they are academics who have been involved with paper work shuffle for so long that they have no option to return to teaching; yet, their former colleagues and students color their actions since their administration is somewhat ineffectual. They dote on the unquantative, unquantifiable aspects of the University, fearing that it is all a qualitative phenomenon. To develop strong leadership for decision-making is to destroy the fabric by analysis.

Then, we have the super - structure. Most private universities do not have a president. They do have trustees-- men who are sincerely interested but behave somewhat like absentee landlords. Often, on the board of trustees, there is a black, or a young woman or women (token of a new found paranoia, mainly at private universities). It helps if the trustees can find a young black woman for

membership. With this internal-- what you might call chaos-- with this lack of real direction, there is no answer to the question: who owns the private university? As a consequence, the private university as an independent, pluralistic force is, I think, a myth. But it is a myth which is somewhat effective in that it is accepted by many parts of society, including government. The threat of a so-called private university's embarking upon a course that is not congenial to its external environment is in practice very minimal. The theory of its doing so, the myth-producing threat does have some validity and does perhaps provide some reason for poise within our suicidal fabric.

BERG

Dr. Bassett did not, I feel sure, mean to leave the impression that during the last half century, the American universities have been a place where only the sons and daughters from the well to do were admitted. On the contrary, during the last half century, the American university (and here I include all the urban universities, the city colleges and institutions numbering upward of 2,000 in all) have been the means by which gifted youngsters of the poorer classes-- descendants of the immigrants of the 1880's and '90's --have risen socially and achieved status in business and in the professions. That is how those groups have become absorbed into the general ~~plan~~ of middle class America.

Today, our efforts are directed toward getting as many blacks educated to a level of merit so that the next generation will take care of itself. The feeling of obligation to the black people and to the other disadvantaged groups is now ecumenical rather than individual. The attempt being made today is mass education in a very literal sense.

BROWN

So far, the influence of trustees and boards of regents upon the active work of universities has been slight. What I am saying is that regents and trustees in private universities have until now exercised little influence upon the selection

of faculty members or upon the determination of curricula. California is, however, a great exception.

Now, however, the result of the confusion and agitation has been to knock heads together-- everywhere. It is very likely that trustees of private universities are going to interfere with doings much more, and so will the elected regents and governors of state institutions. Indeed, it may happen that in the state institutions, where often these governors are elected, the population will elect rather conservative people, whereas in the private institutions-- yielding to a vague pressure --there will be much more effort to introduce, as my colleague, Dr. Bassett, has said, the younger members of minority groups, women, and other supposed representatives of the **downtrodden population**.

Two or three observations may be contributed to the reality of the role of trustees. Until very recent years, the trustees have been in a sense a self-perpetuating group, modified only by periodic vacancies.

Trustee committees, charged with nominating replacements, have quite typically asked different people on-campus (the president, maybe some deans, and some of the leading professors) for suggestions of names that would **qualify**. However, by and large, the board of trustees of the academic institutions have for the most part gradually evolved into groups that feel quite uncomfortable when they are asked to make a judgment on academic matters. They are much more comfortable in thinking about investments for the endowment portfolio, the erection of new buildings, the academic program that has been recommended by the president, or other matters of this sort.

But this kind of situation is changing, reflecting the pressures of minority group members and younger people. I think more and more we shall find trustees of academic institutions concerning themselves with the academic program that is underway, or that is in the process of evolving. This has several implications: if your trustees are men of small vision, they can attempt to impose

their ideas on what the academic programs should be. I rather think that this is an unreal situation; but great deal has been learned, certainly by our academic administrators, over the years. I think the same concept dominates the thinking of most trustees that I know. The academic community must at all cost be maintained as an open community to receive alternative ideas and alternative thinking. You will find some of the wildest ideas emerging from our campuses without any action whatsoever on the part of the trustees. I suspect that this probably expresses my basic posture of optimism. I do not fear the need to encourage trustees on maintaining the cherished concepts, namely academic freedom in the classroom.

I would much prefer the sort of trustees that the private institutions have, such as Columbia has, to state senators or state representatives. The trustees are only as important as nuisance in terms of distracting the administration of the university and its real task within the university, in distracting the energies of the administration from the process of managing. Too much time, too much energy is spent, really, in catering to the trustees and not enough time is spent by the administration in negotiating, in dealing with and in communicating with, the various constituencies of what really is the university. This exists, I suspect, as much in state institutions as it does in institutions such as Columbia.

The problem of ownership, which I mentioned earlier, is just as removed as it may be with a State University, whereas private universities having trustees, the directors have nobody elected to give it political legitimacy. Our largest corporations in the U.S. have become publically accepted, because there is at least more legitimacy of stockholder participation, required government disclosure, and the ever-present threat of public regulation. None of these attributes are recognized or admitted in the case of the private university. This gives it a peculiar political susceptibility and centers the power of being susceptible to public scrutiny or public control.

V. THE UNIVERSITY'S EXTERNAL RELATIONS

THE UNIVERSITY'S RELATIONSHIP TO THE COMMUNITY*

The school and its environment are separate realities, but they are closely inter-connected in an immediate relationship of reciprocal influence. This relationship is necessary to the school, which must receive from its environment, or, we might better say, from society, concrete stimuli and guidance, if it is to be a real school, both for the present and for the future. But this relationship is also necessary for the environment, both physical and social, in which the school lives and operates, if man is to become a part of this environment, in harmony with things and other men.

This is all the more true for the university, whose task it is to solve the greatest, most vital problems of society and individuals and prepare these individuals, through cultural formation and information, to shoulder the highest leadership responsibilities in the community to which they belong.

The problem of a closer and more healthy relationship between the university and its environment is today at the center of attention in all countries. I shall discuss this problem briefly, with reference to certain of its basic aspects in Italy.

*This paper was presented by Rector Giuseppe Ermini in Dialogue 10, at the University of Michigan, on "The University and the Community". Prof. Ermini was a member of the Chamber of Deputies, 1946-48; Under-secretary of State for the President of the Council of Ministers in 1954; Minister of Public Instruction in 1955; and the President of the Standing Commission for Education and the Arts of the Chamber of Deputies. His special interests include teaching methods, and the relationship of the university to its environment.

A general and powerful revival of activity and an anxious searching for new forms and new values are some of the characteristics of social and political life in Italy today.

The Italian people-- enlivened perhaps by the atmosphere of democratic freedom they breathe and stimulated by the in many ways deeply innovating provisions of the Republican Constitution of 1947 --seem to be struck by an almost feverish activism. Indeed, we can say that they have made much more progress in the last twenty years than in the previous eighty years of their national unity.

This rapid political, social and economic evolution of Italian society has inevitably been accompanied by the continual eruption of new, various and ever more numerous problems. For the school, this has meant a pressing demand for culture to solve these problems.

This demand has two aspects:

- a) a demand for more culture, both in extension and depth;
- b) a demand for a different sort of culture than that provided yesterday.

Although the problem of adapting the university to its environment is common to many countries, in few others is it as deeply felt and as serious as in Italy. And this for the following reasons:

- a) the exceptional rapidity and depth of the transformations society has undergone in recent years and the consequent exceptional increase in the demand for culture, and for culture of a very different type;
- b) the fact that the universities in Italy are almost all state institutions and thus function under the same general regulations, despite the differences in the needs of the

various regions in which the individual universities are located and operate;

c) the fact that the regulations that govern the Italian university today are basically the same as those of almost fifty years ago, which were patterned in many ways on the Casati Law of 1859, in turn based on the heavily centralized Napoleonic University system of the beginning of the last century.

That in the midst of a society in such rapid, deep and continual transformation and so changed with respect to the even recent past, the university now carries out its delicate task of guidance and cultural promotion in the best of ways is something I would hardly dare to say.

The Italian Parliament realized the importance of the problem when, as early as 1962, with Law no. 1073, it called for the establishment of a Commission to investigate the state and needs of public education in Italy, to map out its development in relation to economic and social development and to establish financial needs and necessary changes in existing regulations. It was this Commission, which I was called upon to preside, that clearly denounced to the government and Parliament in 1963 the crisis which had already struck the university and seemed destined to worsen with time, and that proposed those legislative and administrative measures it considered capable of correcting the situation.

But the Italian university was not ready to adopt these proposals and reform itself, as I would have hoped; nor was Parliament prompt in acting on the University Reform Bill presented by the government at that time. The IV Legislature thus drew to a close in 1963, without any action having been taken.

For the purpose of better adapting the university to its environment, the major problems now under consideration in Italy can be divided into two categories: problems of quantity and problems of quality.

The quantitative problems, arising from the increase in the student population and the new demands for culture, can be broken down into problems of equipment, the need for new and more modern buildings, with suitable teaching facilities and scientific equipment; problems of numerical increase in teachers, lecturers, administrative, technical and maintenance personnel; and finally, problems of financial assistance to students.

The problems of equipment, of increasing administrative, technical and maintenance personnel and of financial assistance to students are more easily solved. Basically, they only involve a greater availability of funds, which has already been provided with the legislative measures of recent years, which are now being put into effect.

A more difficult problem is that of a numerical increase in teaching personnel. Whatever some people may think, it is illusory to think that we can solve this problem by simply increasing the number of chairs available to the universities. Such an approach would be extremely dangerous and its only result might well be an unfortunate lowering in present standards of teaching and research.

When we are dealing with quantitative problems, the basis question is whether we should continue to keep the doors of the university open to graduates of secondary schools to the present extent or instead make access to the university more difficult.

On this point, the orientation of responsible public opinion in Italy

seems anything but clear, and I must therefore ask permission to express my own personal opinion. To solve the various problems produced by too many students, I feel that we should first of all determine the maximum number of students that can be enrolled in any one university or course of study; if and when applications exceed this number, other universities or courses should be opened, as has already been the practice for many years at the other levels of schooling. Secondly, we must organize a better system for preparing and channeling students towards the various professions and jobs, in relation to so-called national economic planning. This can be done, not by rigidly limiting the number of students admitted to the various specializations, but rather by working through professional orientation counselling services at each university, with the use of possible incentives and greater selectivity.

The problems of a qualitative nature are considerably more delicate.

Today, the nation asks Italian universities for something more and something very different from what it asked in years past. First and foremost, it asks that a university turn its eyes with greater attention towards that society of which it is an essential part and source of life: a society represented within the university itself by the constantly changing student population. Today, these students increasingly come from every social class and bring with them the most varied habits, interests and needs, many of which were hitherto unknown in the university world.

A prompt or at least not overly drawn-out answer to these demands on the part of the university may be hindered by the cultural tradition that the people carry within them, based on their acquired historical

experience and their particular sensibility and wisdom. The Italian university undoubtedly has a noble and most solid tradition of many centuries standing, and this at times makes it difficult to distinguish between what part of this traditional culture has an authentic value of truth, and should thus be conserved, and what part is instead merely incrustation born of needs from another age, and should thus be discarded. This is true with regard to both the basic structure and operation of the university system, about which so much has been said, and the type of culture imparted.

In my opinion, this last problem, the type of culture, is the major problem facing the university today.

Traditionally, the Italian university believes in a culture that is, first and foremost, a balanced possession of spiritual values allowing man to dominate himself and the physical world; a culture that is, at the same time, knowledge of human natural laws that ensure its elevation and regulate relationships of life in common and knowledge of the laws that regulate the material world of things in which man lives and enable him to put it to profitable use. This tradition imbues the university with the conviction that there exists a mutual bond between culture and civilization that is particularly expressed in the possibility for each man a balanced satisfaction of his own personal, spiritual and material needs and to live in harmony with other men and in correct and prudent use of the goods offered by the nature that surrounds him.

Imbued with these principles, we Italians have our example, about a culture, such as the present one often oriented towards the conquest of the physical world, and, in contrast,

so poor in the field of the spirit and common ideals that it seems more bent on dividing men, in the struggle for material wealth, than on uniting them; about that culture which a few decades ago earned scholars the accusation from a very authoritative critic that they were "betraying" mankind. We are puzzled by a science of the outside world so enormously developed and deepened that it at times embarrasses reason and intellect and which, impoverished in its higher aspirations of civilization and spurred on instead by the material utility of its discoveries, turns these discoveries over to technology for immediate exploitation, thus provoking the growth of the latter to such dimensions that it threatens to suffocate man's very personality, which is conditioned, and even offended, in its natural development and expression. We are concerned about the oft-heard exaltation of a science which, forgetting not a few higher spiritual values, almost pretends to ignore the absolute values, for example, of love for its own sake, of truth for its own sake, of beauty for its own sake, or of reasoning as such; a science that remains unperturbed in the face of the damage all too often done to common morals and that, reducing virtue to action and setting activism before thought, elevates doing above being and the basic aims of the latter.

We cannot but think of the central motive behind the so-called "global contestation" moved against today's society and culture by a part of modern youth. This motive lies essentially in youth's refusal to subjugate life to the quantitative development of production and wealth, to give in to the technocratic power typical of industrial society. It lies in a desire to assume human responsibilities for those basic decisions that youth does not intend to delegate to the pure rationalism of technicians.

I have no intention of denying the immense importance for human civilization of the progress of science and technology in our times; but I still hold that the new scientific and technical humanism, of which we have heard speak, cannot in itself offer a new and better order to humanity, without the guidance which only human ideals are capable of giving. Therefore, I will not let myself be taken in by the illusion that the advance of scientific progress alone can entirely satisfy our needs as men, and these are the needs which the environment expresses.

I fear that a culture of this type might well be degraded to the rank of a hand-maid of politics, passively accepting, rather than disciplining, the many and contrasting impulses thrust upon it by men and society, all caught up in the anxious and vain search for material well-being and spurred on by the powerful force of the instincts, in the absence of human wisdom.

Since the major centers of this wisdom, which mankind institutes, recognizes and respects for its cultural and civil progress, are the universities, particularly in Italy, it is clear what enormous responsibilities fall upon these institutions and how the charge of betrayal mentioned above might also fall upon them, and especially upon them, if they fail to find answers for the new demands rising around them.

In conclusion, may I say that I am contrary to the reformistic extremism of those who want to reform everything in the existing university system and in culture at once, plunging the scalpel, with little discrimination, into the delicate fabric of essential structures and cultural content created by hundreds of years of work and experience in our universities. But I am equally contrary to the conservative extremism of those who, although they may be convinced of the necessity of

modernization and reform, prefer, either for excessive prudence or fear of the worst for the sake of so-called tradition, to keep everything as it is, closing their eyes, in an obtuse conservatism to the reality in which they themselves live and of which they themselves also feel the pressure.

I am convinced of the necessity and urgency for a deep and incisive reform of the universities in my country; a reform, however, that safeguards the authentic traditional values that are worth conserving. I am also favorable to a revision of methods of education, methods of teaching and cultural contents; a revision aimed at bringing about a radical renewal of university life which will answer the needs of the environment to the greatest possible extent and which, discarding those things that are no longer felt, will enrich the university, purifying it of the scum of a past that is no longer ours.

If I have taken the liberty of confirming in your presence these brief considerations which I already expounded some time ago to the Italian Parliament, I have done so not only to enjoy the pleasure of this meeting and the kind attention with which you have followed me, but also to hear your opinions and advice on these problems, opinions which I now eagerly solicit.

COLUMBIA'S RELATIONS AT ITS BOUNDARIES

BERG

Introductions - Professor Eric Holtzman is Professor of Biological Sciences here at Columbia University, and I think he probably also has his degree from Columbia. He is a member of the University Senate and has a number of interests in the whole matter of research in a private university and some of the involutions that that research may carry with it.

Mr. Gilmore is the Vice-Registrar of the University, the Registrar being the apparatus responsible for the University's central record keeping of all the students who belong to the many separate faculties and departments.

Dean Raymond Anderson, who is in the middle of the group here, worked for many years in the Registrar's Office. He is now Assistant Dean of the Graduate School of Arts and Sciences, which is the faculty that awards the Doctor of Philosophy Degree at Columbia.

Next is Professor Albert Rosenthal, who is a full professor in the Faculty of Law here at Columbia. Among other distinctions he is a member of the University Senate, elected by the Senior Faculty of the Law School, and he has as well been involved in recent years in analysis of the relationship between the University and the Federal Government in connection with federally-financed research.

BERG

Externally Funded Research - The topic we have before us is perhaps not an unusual one in Europe, having to do with the kinds of issues that are generated as a consequence of the fact that the University, particularly a private university, is so extraordinarily dependent upon and involved in its research

activities.

In recent years, research has generated a number of specific problems. We also have at the outer edges of the University a complex set of relationships with groups other than the government, and while these gentlemen don't have very much to do with each other, in connection with relationships with other groups off this campus, they do have in common an exposure to and a familiarity with a special component part of those relationships. For that reason, we have brought them together, perhaps to their own surprise, not a group that one would ordinarily bring together. I have asked Professor Rosenthal if he would make a few informal comments about research problems, or the important problems he has identified in his studies here. Then, we can pick up from there with the other participants. Mr. Gilmore and Mr. Anderson, I think, will be able to explain what the relationships and obligations are between the University and the agencies that monitor our Charter under State Statutes.

ROSENTHAL

This University, as most universities in the United States and presumably elsewhere in the world, devotes a great part of its time and attention to research as well as to instruction. Before the Second World War, whatever research was done was almost entirely financed out of the general funds of the University. Faculty members did research; but they did it in their spare time without receiving any extra compensation for it. Students who assisted most frequently did it simply as part of the learning process.

A change came at the time of World War II, when the Federal government discovered that by far the greatest source of talent in the scientific and technological fields was in the universities; so, the Government financed research at the universities and put up the money for it to enable it to proceed more rapidly. I guess the most dramatic instance of this in our history was when Columbia University was asked to undertake the initial stages of the development of the atomic bomb, and many other efforts in the direction of creating weapons and defensive mechanisms, took place in the universities.

At the end of World War II, the Federal government continued to finance research in the universities, and even expanded the rate at which this was done. As time went on, the proportion of financial aid that pertained to weapons and military matters gradually became less and less. But the universities remained dependent upon outside financing for many of the things which they wanted to do in the field of research. The typical situation was that a professor in a university wanted to learn something about a subject for the sake of purer knowledge, and the same information seemed to be useful to the Federal government in pursuance of some program. So, the government decided to provide the money whereby it could be done.

This decision has given rise to some critical problems. For example, some of the knowledge that is acquired in this fashion may be regarded by the government as in the category of military secrets. So, the government may wish to restrain the publication of the findings of the researchers. There is a general feeling in our University, as I am sure in yours, that

scholarship in a university should be intended primarily to increase the total amount of knowledge of all human beings, and should be freely communicated to everybody--not just relegated to the archives of some governmental agency.

Similarly, there are times when the sponsoring agency feels that it should have something to say about who may be allowed to work on a research project; and, if it doubts the loyalty of some student who is helping a professor in his research on a secret matter, it may wish to say that a particular student may not be employed. Many of us feel, however, that it is unseemly for a university to allow barriers of that kind to be interposed in the way of a student's work for which he is qualified; and, moreover, if the University undertakes a project, that it should be master in its own house. No outside agency should be permitted to tell it whom to employ. In both of these respects, the University Senate has recently voted to recommend that the University refuse to accept any future research grants where any outside agency, governmental or private, may impose restraints, on the publication of research findings, or dictate who may or may not be employed on a research project, or require the University to set up security classification systems within its own ranks. In some ways, however, what I have spoken about is the more dramatic, but I think the least important problem that comes from outside financing of university research.

The abuses of the kind that I have just described are not too frequent. Most of the research is done here, even on behalf of the U. S. Department

of Defense, have been completely unclassified, and completely consistent with the ideals of academic freedom. What has happened, however, is the University has become dependent on this outside money, has structured itself on the basis of having it come in, and has found itself weakened financially and embarrassed when this money is suddenly removed. Moreover, decisions as to what kinds of research the University should embark upon, the priorities, that are determined, both within the University as a whole, and also within each individual school or department, ought to be dictated by what the University or its schools or departments feel is most important in terms of its mission, rather than in terms of the decisions of some outside agency that has money for this or that purpose. This is a problem which we at Columbia have done no more than identify. We have not, up to now, adopted any measures or procedures by which we may be sure that our decisions as to what research should be favored is based on our own good judgment rather than on the highly irrelevant fact whether some outsider is willing to finance it or not.

QUESTION

I should like to know if, at least at Columbia, whether in the normal University Budget, there are funds appropriated just for research. For example, if a program of research is not found to be useful for the ends which you have suggested, is it possible that such research can be conducted with the funds of the University in some way?

ROSENTHAL

Yes, if funds are not available and the research is deemed advisable, there are some uncommitted funds which may be used; but these are limited. This University, and many American private universities, are in a very difficult financial position today.

QUESTION

Before the Second World War, when you did not have these governmental agencies, research was conducted solely with the funds of the University?

ROSENTHAL

I think that is correct, that is, it is largely correct. There were a number of research contracts before World War II that came from the government. For example, the overwhelming portion of anthropological work that was done by American anthropologists in the South Pacific was subsidized by the Office of Naval Intelligence, without any specific understanding by that Office that it would particularly serve their purposes. The fact is that the Navy had operations overseas and it sensed that some of this research would be useful; but the grants were typically broad of the requirements, hardly specified.

I think that a lot of the problems we are now beginning to face, particularly the funding of scientific research, are quite new to almost all of us, because it is only in the last few years that there has been a very sudden deceleration of the amounts of money being brought into the University. So, I think it is important to remember that as part of the overall government financing program, there was first of all a large increase in personnel in the

University; and, second, a large number of training programs for students that were instituted. These projects were financed either directly or indirectly as part of our effort to stimulate science.

How as the amount of money and the rate of financing decrease suddenly, not only do we have a problem of what to do with research, but what to do with staff and students who have undertaken programs that are well under way? We are also beginning to suspect we will have much of a problem with overproduction of trained personnel, such as Ph.D.'s in some of the sciences for whom the kinds of jobs that they had anticipated entering no longer exist, or we think no longer exist.

QUESTION

Would it be possible to know what proportion of the annual budget of the University is dedicated to pure research? Second, is it possible, for a Columbia professor, who is engaged in research in his special field, to obtain funds directly from one or different agencies?

HOLTZWAN

In the divisions of the pure sciences, which are the only ones that I am familiar with, most of the research that goes on is pure research, although often it is financed by a group that is interested mainly in applied research. One of the things that probably will happen now, as the government reorients its own major interests, is that at least for a period, there will be more attention paid to applied rather than pure research. But it is unlikely in the foreseeable future that if the University stays as an organization as it is now, more than a fraction of the pure scientific research will be diverted to applied.

Now, in terms of financing, again in the pure sciences, the bulk of the contracts are brought in by individuals, but are administered by the University. In the medical divisions the situation is obviously somewhat different in that there are many, many programs now developing, and there always have been, which are somewhat more oriented toward applied research. A number of the training programs in the medical sciences are still receiving support whereas comparable programs in the pure sciences are not.

ROSENTHAL

It is Federal policy under the current administration in Washington to pursue a great deal more applied research, the consequence of which is that my office regularly receives notices through such agencies as the well-known National Science Foundation, announcing that it has, for example, \$6 million available for the academic year 1970-71, which it calls, and you'll have to bear with me, "Program for Interdisciplinary Research in Social Problems." This Federal program is in addition to a whole array of programs that supplement University budget expenditures for research assistance and for the training of people in the physical and other natural sciences, who will move on to become the researchers and the teachers of the future.

I visited N.S.F. about this \$6 million to talk about terms, and it was made very clear to me that they were serious in the use of the expression "Social Problems." When I asked for some illustrations, they said they would be delighted to have a combination of basic research from each of

several scientific areas, such as biology, sociology, law and genetics that would focus on problems like earth defects. But the problem that they had in mind was undernourished pregnant women in the nation's inner cities whose children become an enormous expense to society and to the extent that they become uneducable and eventually unemployable. N.S.F. was obviously not interested in research that would take a specific sight on the biological, genetic, sociological programs that would be necessary to reduce the risks of birth deformities attributable to malnutrition. N.S.F. fully expects to expend all of the \$6 million on these kinds of programs, and it is perfectly willing to insist that the separate departments of the University and even non-university agencies be driven to collaborate on these kinds of issues.

Another illustration was garbage processing, the delivery of fire department services and the effectiveness of police departments. In these latter cases, N.S.F. would anticipate professors and researchers in law, sociology, electronic communication, and so on to work together. So, government is tolerant of basic research, but only if there is a research program of social consequence. One can imagine the difficulties in a university, organized along the lines of separate academic departments, in assembling interdisciplinary research proposals that will earn this kind of money. Great difficulties!

It is very difficult to separate pure and applied research for budgeting purposes. Something very close to half of the University expenditures in a

given year are made from research funds that have been applied substantially from government sources; but breaking down the applied and the basic is very difficult. We could argue that it is overwhelmingly basic research.

The amount of funds allocated by the University for specific research projects is limited to a trifling sum for junior faculty members and is allocated to a number of small councils, which review modest proposals and allocate the equivalent of part-salary during the term in which a young man or woman is not teaching. Much of that funding comes from gifts to the University. Unspecified grants come from foundations designed to further those programs.

One final word, the typical teaching load for a professor does not occupy his full time. In our Law School, with which I am most familiar, we have an average of five hours per week of classes. We could, if we wanted, go down to Wall Street and multiply our salaries many times over by selling our spare time. But the understanding of our faculty is that such outside activities should be very sharply limited, and that we have an unwritten obligation to use the remainder of our time for scholarship.

So, one might say that somewhere between 50 and 90 per cent of my time ought to be devoted to research, that the University is paying for that research out of its general funds by giving me a full-time salary and only obliging me to teach for a very small part of my time. But we would like to keep clearly before you this general issue of research, namely, the

extraordinary difficulty that we have in controlling the size of our research activities. There are multiple extra costs that go with research, only a portion of which we recover from the research grants, and the added difficulty we have in shaping the style of the University, in an age in which the grant or the donor so often specifies in detail what he would like his funds to be spent on. We do not have adequate sources to encourage the kind of research projects that might, and I underline might, normally come before a council of one's colleagues, to receive a collegial university imprimature. So, we are constantly fighting a quiet battle to preserve the autonomy of a researcher who wants to select for himself what he wants to do; and we do this by facilitating discussions with granting agencies and by trying to persuade faculty members on the virtue of undertaking lines of research we think are important.

This is quite often difficult, irritating, frustrating, as well as an unproductive activity for an administrator.

Q & S. 10N

I listened with keen interest to Professor Rosenthal's description of a full professor's role. If I heard him correctly, he applied two conditions; one was a moral condition in which a professor averages only five hours per week of classes, leaving much to his conscience what he does with the remainder of his time; and a second condition in which a professor at Columbia has a "legal contract".

Is my impression correct that, for those who fail to fulfill their obligations, there are ways for the University to use coercive measures to be rid of sluggards?

ROSENTHAL

That's a very good question. We have what is known as tenure; so, as a practical matter, there is no legal right to force tenured professors to live up to these moral obligations. There are some who do not. As far as I know, the University does nothing about it. Within a faculty, public opinion of one's colleagues may be a much more effective sanction than any action taken by the University as a whole. But even so, there are many cases of professors who do not adhere to this moral obligation.

HOLTZMAN

Governmental Enticement. I think when the first Sputnik occurred and the years immediately following, the Congress of the United States decided to involve itself in many programs. When it decided to involve itself in education, it gave the title "National Defense Education Act" to its program. The same thing was done even for building super highway.

The Congress of the United States argued for its program as always contributing to the National Defense, even for those programs which were clearly education; but many people in the Columbia University Center felt that this was a dangerous habit to get into for the future of the University and for the future of the country. So, in addition to the practical argument that Dr. Rosenthal introduced, it is also an argument that the University has to begin to define its own role in society rather than allow rationalizations of the rest of society, particularly the government, to control its decisions. So in a sense, it was a declaration of opinion as well as a practical decision. The opinion was that for a University to think of itself as a national defense

agency, which educates and does research for defense, while everything else is just incidental, is a bad thing. Such was the tendency in our situation as it developed.

PRINI

In light of your remarks is it not true here in the United States, as it is in Italy, that the University runs the risk of funding researches which the professor should actually be doing on his own account as a scholar?

HOLTZMAN

I think this is a constant problem whenever money is needed for more than just the Professor's time, travel expenses, salaries of assistants, and so forth. In many fields that is not the case. From time to time, outside sources, in some cases governmental, in some cases private foundations, or similar groups, have offered to pay me to do research work that I would have cheerfully done free and I have accepted the money. There are undoubtedly in any university community those professors who are particularly skillful at persuading donors of funds to finance the projects they would have been willing to undertake, regardless of whether financing was available. But the dividing line is not a very easy one to draw.

ANDERSON

At all levels, the purpose of funding these programs, of course, is to provide indirect financial assistance to private institutions that until recently received no financial assistance from the State. Historically, within this State, the private institutions provided most of the places for college students; and this reflects, to a large extent, that a good many of our private institutions pre-date the existence of the New York State Board of Regents. I suspect, for geographical reasons, the State took less advantage of the

Federal Land Grant Act in establishing its public institutions of higher education. The trend in the direction of private institutions has changed in recent years with the establishment of a relatively new multi-campus State University of New York. Even while public institutions are growing, student enrollment still does not equal that of the private institutions. Last year, for the first time, the State furnished funds directly to private universities in recognition of the fact that increasing financial problems were faced by these institutions. This aid reflects the State's current concern that private institutions require support in order to preserve educational opportunities available in the State. I think in the context of our discussion of Federal financial support that State support is of far less significance. But the implications of it are quite similar. The State's primary concern in supporting education within the State is an indirect attempt to support the economy through training manpower for business and industry, and to enlarge primarily at the undergraduate level the opportunity for New York State residents to attend college.

QUESTION

Is there some formula or perhaps a procedure that allocates support for private institutions; and, if this is not so, is there a competitive environment created between the State supported and the private institutions, all being within the State and perhaps many in the same city?

I think the two parts of the question are not mutually exclusive. The answer to the first part of the question is that the State does indeed attempt to reduce the financial burden on private institutions, and in some way the costs to student residents of the State attending private institutions. That would appear, on the surface, to suggest that private institutions are not in competition with public institutions.

In maintaining private institutions, I think the State is trying to support the notion that there is some excellence in private institutions. They find their role less directed by State, by state law, and by state requirements. The State wishes to encourage the kind of excellence that is found in private institutions through a kind of competition with its own institutions that in many ways have similar academic roles.

The public institutions are quite new in New York State, but I suspect there is a feeling on the part of the State that its own efforts on higher education are relatively new, that while it is developing or has developed some programs of excellence that excellence might be developed more readily in a climate which is competitive, and in competition with the excellence of long established private institutions.

The assistance from the State of New York to private institutions takes, as I suggested, two forms: one, financial assistance to students for tuition which is clearly indirect support of the institution, and second, very recently, last year, direct grants to private institutions without any strings for new or specific purpose.

GILMORE

Well, I would like to mention something specific about the type of State boards that were given to students in private institution. Each year approximately 12,500 scholarships are given by the State of New York on a competitive basis to individual students. The nature of the scholarships is based on the financial income of parents of the student. It ranges from \$250 a year to \$1,000 a year. It also grants special scholarships in the field of nursing, medicine, dentistry, as well as fellowships in the doctorate areas of the arts, the sciences, and in engineering.

In addition to the scholarship and fellowship programs, the State initiated, around 1960 I believe, the Scholar Incentive Program, which is not

administered on a competitive basis. The sole criterion for receiving a Scholar Incentive Award is the fact that the student is a resident of the State of New York, that he is a full-time student, and that he is making satisfactory progress toward his desired degree. These Scholar Incentive Awards are issued to both undergraduate and graduate students. They range anywhere from \$100 to \$1000 a year, and again they are based on family income, taxable income. The amount of Scholar Incentive assistance, fellowship assistance, and scholarship assistance from New York State at Columbia reached almost \$3 million for this past year. It is planned in the future that the State will re-design the scholarship program and the Scholarship Incentive Program into one Scholar Incentive Program, with awards not based on the competitive examination.

QUESTION

Mr. Gilmore, when you say \$3 million, do you refer to Columbia alone or for the entire state?

GILMORE

The awards in the State of New York are granted directly to the student (not to the private institution) because part of the problem has to do with the separation of church and state.

QUESTION

What is the difference between the three types of grants you mentioned?

GILMORE

The scholarship is granted to undergraduate students, students working toward

B.A. or B.S. degree, and granted on the basis of a competitive examination. Fellowships are really the same except that they apply to graduate students. The Scholar Incentive Program applies to both undergraduate and graduate students.

FLORIOI

You spoke about 19,500 college students in the State University of New York. I should like to know, how many colleges does the state have and how many universities are there?

GILMORE

We can get those figures for you.

QUESTION

Does it happen or is it possible that the student will transfer from a university in the State of New York to a university in another state?

GILMORE

Yes, that is possible.

QUESTION

Can the student take the scholarship with him?

GILMORE

No, he cannot. He can take the scholarship with him only within the same state.

QUESTION

Apparently, it is possible for a student to begin a semester here at this University and then do the second semester of the same academic year at another university on the scholarship?

GILMORE

Within the State of New York. The tuition charges at a state institution are really nominal charges and are below the amount charged by our private institutions. City College, for example, I believe, have standard charges for the year

of \$400, as opposed to the Columbia charge of \$2,000. The public institutions receive subsidies directly by nature of their being public institutions, and the difference between the nominal tuition of \$200 and what might be a more accurate reflection of what the student should pay to support a reasonable portion of his education is directly subsidized. The aid to students at private institutions is in some way equivalent in an indirect fashion of the direct subsidy to public institutions.

BERG

I am anxious since the hour is getting late that we have the opportunity to hear about one of the other important populations bearing on the life of the university. Vice President Emerson is here and can help illuminate a little bit — some of the questions that came up yesterday when we discussed some of the relationships between the Board of Trustees, the Senate in the University, and the structure of the University.

We have a large body of alumni and also a large number of friends of the University, and some of you raised questions yesterday about our relationship with private corporations, our efforts to get funds from these, and also some of the formal relationships between ourselves on the campus and our alumni group. I would be grateful if Mr. Emerson would address himself to some of these subtle, and political, and financial problems as he sees them. He is the Vice President for Development with major responsibilities for planning the University's approach to a variety of agents that provide funds.

EMERSON

Let me start by saying that Columbia University has approximately 110,000 alumni residing in 121 countries. The Alumni of the University overseas occupy

many positions of great distinction in their countries. At the present time, the Premier of Belgium is a graduate of Columbia. The President of the National Assembly of Afghanistan is a graduate. The Minister of Education of Iran is a Columbia graduate. The Chief Justice of the Supreme Court of Thailand is a Columbia graduate. The editor and publisher of The Economist in London is a Columbia graduate. Of the Columbia alumni, approximately 15,000 former students now reside outside of the United States. The 15,000 is a mixture of citizens of other countries and Americans living abroad. The most active Columbia University alumni group anywhere including the United States is the Columbia University Alumni Club of Japan. This organization was formed by our Japanese alumni, not by Americans. Three years ago, they took the initiative and formed a foundation called the Yoshida International Educational Foundation. Their first major gift was made to Columbia University. It was \$17,000 for the East Asian Library collection.

EMERSON

Alumni, Donors, and Other Friends. In a discussion of Columbia University's External Relations, it is fitting to point out that we enlist the financial support of friends, of corporations and of foundations, which have no direct relationship with the University.

At the present time, Columbia averages about \$7 million per year in gifts and grant income. Next, what money comes from provisions of bequests, from foundation support, from corporation support, and from individuals - alumni and non-alumni? In our next fiscal year, it will be necessary for us to raise at least \$20-30 million in gifts and grant support. This is absolutely essential and the figure is a minimum if we are to maintain our present position of excellence as one of the U.S.'s outstanding international institutions.

Recently I took the initiative and formed a series of Columbia University Alumni Faculty Clubs in the major capitals of non-Communist Europe. The alumni group in France has been in existence for five years. Next year they will contribute a minimum of \$12,000 to the institution in order to provide financial aid for qualified French students to study here. The alumni in Norway, in Sweden, in Finland, in Belgium, in England, in Greece, in Turkey, in Iran, in Switzerland, and in Italy are all being asked to assist the University by providing money for financial aid for students from their countries to study here. As a result of these activities, a year ago I appointed a Director of Alumni Relations for Europe, who resides in Paris. As far as we know, Columbia University is the first institution to establish an Alumni Relations Office outside the United States. It is my hope to establish similar offices in Asia, and in South America within the next two years. Again, for much the same purpose.

In the United States today, the foundations are providing the major amount of financial assistance from private sources. Corporations only recently have become sufficiently enlightened to start to provide corporate financial aid. This particular source of income is the one that is going to have to increase, most drastically, in the immediate future. The type of income that a private institution needs in the most critical fashion is "unrestricted" gift income. Now, in case there is any confusion, let me define "unrestricted." An unrestricted gift means that the money can be used at the discretion of the administration and trustees. This particular need is still not being met to the necessary degree by either corporations or foundations, or in the main, by individuals; it presents a very definite problem.

As many of you may be aware, you can only raise funds in a manner that meets with the favor of the donor, and most donors have some particular purpose in mind. In many instances their purposes are peripheral to the central needs of the educational program of the University. Now, this is no more true of individuals than it is of corporations and particularly foundations; and, although there is some disagreement about what I will say, I happen to believe that the foundations in the United States have put the universities, the private universities, in a very precarious financial position.

What has happened in recent years is that the major foundations such as Ford, and Rockefeller, and Sloan will offer an institution a considerable amount of money for the purpose of establishing an entirely new program, whether it be an interdisciplinary institute, a new program of study, or what have you. All universities, being hard pressed for funds, have felt obliged to accept these monies. The foundations, in giving the money, have made it clear that they will give an initial gift or grant in order to establish a very costly new operation, but they will not guarantee any further financial support for the operation, once it is in being. So, you

are put in the very difficult and embarrassing position of making a large publicly-known commitment for a new program that has been initiated at the behest of some enterprising man in a foundation; and, then, you must scramble to find other sources of income in order to perpetuate the activity, or else divert the limited resources of the institution from another part of the educational program in order to sustain it.

Now, the Ford Foundation has been particularly guilty of this type of unsound activity. The time is at hand when most private universities are going to have to refuse this type of gift, because they will drive us into bankruptcy, in short order, until the foundations recognize this. It is unlikely that our large corporations, through their own corporate foundations or their other means of financial support, are going to recognize this. However, corporate support usually is provided in a fashion that is compatible with the educational program goals of the institution. This is also largely true of the support given by individuals. Last year individuals, largely alumni, provided about \$2.5 million in contributions to this institution. Almost without exception, the designated use of those contributions was compatible with the central purposes of the educational program. Second, only to corporate support, Columbia in the next decade must look to a vastly increased amount of financial support from alumni and other individuals. Of course it is necessary not to spend money in order to raise money. Columbia happens to be in a rather sound position, vis-a-vis the amount of money we spend in order to attain our yearly gift income. Not all private institutions knew how much money they spend in order to gain their revenue from gift sources. The most prominent example is Harvard. The central administration of Harvard simply does not know how much money it spends per year. It only knows how much money it has in gross income. The reason for this is that Harvard's fund raising endeavors are

completely decentralized as is the administrative structure of Harvard. Columbia came close to decentralization, but fortunately we have stayed within the boundary of administrative control. It is believed by most of us that an institution, and any part of that institution, should spend no more than approximately 25 percent of its total gift income in order to rate--that is, there should be a net income, about a 75 percent return. Columbia is well within those boundaries today; but even here we are going to have to continue to reduce the cost of our development and alumni relations programs, become more effective, and increase our net income on the basis of reduced cost of operation.

One of the untapped areas we intend to explore for additional financial support is at hand. That is, support for country studies, if you will, by foreign governments. There is a strong possibility that the Japanese government within the next year is going to provide three quarters of a million dollars to Columbia to establish an endowed professorship of Japanese Studies. Such a contribution is not without precedence. The Dutch government established a Queen Wilhelmina chair here at Columbia. The Iranian government has made a substantial contribution. Oddly enough, prior to World War II, the Polish Government established a professorship at Columbia. There were no political strings. The professorship, of course, persisted after World War II, but the political climate in the U.S. was such that the witch hunters decided that there must be some strings on this chair and we just rather quietly and simply let the thing pass for the time. Prior to World War I, the German government established a chair. Well, that also became very controversial during and immediately after World War I. I honestly do not remember the name of the Chair, but I think it was the Kaiser Wilhelm Chair. Obviously, when you move into this area, you can be faced with some difficult situations that you do not foresee at the time.

Now, it may amuse you to know, it does not amuse me, yes, it may amuse you, that two years ago, through our International Alumni Programs, Columbia's relationship with the French government was becoming increasingly warm and cordial: and it was the intention of President Kirk, as well as myself, to find an avenue of approach to the French government for the purpose of establishing a three quarter of a million dollar French professorship here.

In March of 1968, please observe these dates, I had a group of four Columbia professors with me in Paris, in Brussels, and in London. In Paris, we were warmly received for an hour by the Superminister, Mens. Schuman. I might add that one of the reasons we were warmly received was that I had two Nobel Laureates in this team, one of whom was French, although a Columbia professor, Dr. Pernot, who received the Nobel Prize for Medicine. This relationship was becoming, as I say, quite cordial. The Co-Chairmen of our program in Paris were the Rector of the University of Paris and the Director General of the CNRS. Well, two weeks later, on the 20th of April, 1968, the French Rectors were our guests, here on the Columbia campus. During the course of our discussion, similar to this, the Rector of the University of Lyons, asked us if Columbia had experienced any of the difficult student uprising situations that some of the other American universities have experienced. We were able to answer openly and honestly, "No," that our students appeared to appreciate the liberality of our problems, that we had been spared these difficulties, and that we believed we would continue to be spared these difficulties. Well, John Rousch responded that he, too, had been fortunate, that policies at the University of Paris had been so liberal that he had been spared the difficulties that had been experienced by other European Universities. We all shook hands,

patted ourselves on the back, and went to lunch. Well, ten days later, Rector Rousch was a prisoner along with his charming wife; and I was mistaken, far and wide, for a plainclothes policeman on the Columbia Campus. So, our hope for increasing cordiality, a healthy situation with the French government and for strengthening French economy at the time, disappeared along with our own complacency about the liberality of our problems. I trust and hope that those of us here, all around this table, will not experience anything similar in 1970!

COMMENT

Vice President Pierson gave you a brief outline of our problems, how we have to obtain support for a private university. One thing that was raised, I gather yesterday, was the relationship between the alumni and the Trustees. As I think you were told, there are six out of twenty-four Trustees who are known as Alumni Trustees. They are nominated one each year for a six-year term by an Alumni body. Columbia does not have a procedure whereby there is a direct ballot election of Trustees. The Trustees are chosen by a group of delegates from the several Alumni Associations which comprise the independently incorporated Alumni Federation. This procedure has prevailed since 1909. In every instance, when a man has been nominated by the Alumni Trustee Nominating Committee, he has been accepted by the Trustees.

Today, there are 17 alumni out of the 24 Trustees, so that the direct participation of alumni in the affairs of the University is very much guaranteed through this procedure. But that guarantee does not satisfy a great many other alumni, many of whom believe that when a man becomes a Trustee, he is no longer part of the alumni body, per se. It is similar to the

situation or the thinking about members of the faculty who become administrators; and, as you know, on American campuses it is widely believed that, when a member of the faculty becomes an administrator, he no longer has any faculty credentials whatsoever. Well, alumni feel something akin to this about the Trustees.

Our alumni associations, each of which is independently incorporated, appoints a number of delegates to the Nominating Committee in proportion to that association's percentage of memberships within this overall federated group. It is not as direct as at other institutions, but I predict that the procedure will be changed within the next two or three years, and that there will be a direct balloting handled by all of the alumni. At an earlier period, the several associations comprising the federation would take a direct mail poll of their membership in order to determine preference. That did not work because practically no one replied.

EXTENSION, UNIVERSITY COLLEGES, OFF-CAMPUS CENTERS

COMMENTARY AT RUTGERS

LEVINE

This building, in which we are meeting, is dedicated to developing educational and training programs for adult trade union leaders. We provide in these facilities education for trade union leadership for specifics in trade union skills and techniques in programs that are designed to increase our understanding of economic, social and political problems. We also provide opportunities for our students to study any program of interest to themselves.

In addition to the extension activities that we have for trade union leaders, we have a specific program leading to a Bachelor of Arts degree in Labor Studies, in the evening college, which Dean Wheeler will explain later. We also have an advanced degree program for trade union leaders in our Graduate School of Education for teachers. Public school teachers in America, as probably in Italy, usually do not know as much as they might wish to know about trade union leadership. This new addition to our program is designed to provide them with an understanding of the American labor movement. At the same time, we have a new program leading to a Bachelor of Arts degree in Labor Studies, in the day college.

This Labor Education Center is part of an Institute of Management and Labor Relations. Our management services are provided in another place, in another building with another staff. They provide for management, the complementary program that we provide here for trade unions. I would be happy to discuss with you later some of the political problems that the introduction of this kind of program in the University has in the United States as well as some you may think may develop if you introduced a program into Italian universities.

Now, I would like to call on Dean McMahon to give you an idea of what the Extension Activities of the University are like and how the Labor Education Center, along with the other extension divisions, actually operates.

MC MAHON

When we at Rutgers talk about extension it is not in the sense that was used in the paper that was presented here, Sir. As I interpreted that statement, your description of extension implies the geographical-physical establishment of remote or distant locations. Here, we use extension in a literal sense, with a dual meaning. It is true that we extend physically, but we also think of extension in terms of providing educational services to people who are not regularly enrolled students in the University. So, we have then these two meanings. In both cases, of course, they give us a vast population for service.

This organizational structure (pointing to chart) is the University Extension Division. You will find a very similar organization of the University of Michigan, with one major difference which may be of interest to you as University administrators. At Michigan, this organization is responsible for the activities which both Dean Wheeler and I are responsible for here.

We in University Extension deal entirely with non-credit courses. By non-credit, I mean activities and occasional short term programs which do not lead in any way to a degree, such as Professor Levine's educational programs for trade union leaders. Many of our students are post-doctoral. We may have a program, say, in infrared spectrophy. The students in attendance already have the Ph.D. This Division is divided into four Bureaus and I will tell you about them because I think their identification will help explain our mission.

The first Bureau, for Continuing Professional Education, which, at the present time, includes law, nursing and labor education. We have within the Bureau an Institute of Continuing Legal Education, which is a three-way partnership with the

New Jersey Bar Association, the University's two Law Schools, and the Practicing Law Institute. Jointly, we provide the Continuing Education. So, when we talk about Extension in American universities, this kind of instruction is one of the major components.

The second Bureau is Community Service, which is concerned largely with programs to help the disadvantaged economically, or to establish programs focused upon the problems of the city.

We have a Bureau of Educational Radio and Television about which I have very little to say. This is a New Jersey wasteland with respect to the mass media. We have no educational television. We have no statewide network of educational radio.

Last, the Bureau of General Education, very simply, includes those things which are not in the other three. Finally, we have a Continuing Education Center where adult groups come in residence a week or so, where we provide semester-length courses for special groups.

At this point I am sure that I have been more confusing than clarifying. Later, I would like to answer questions, if there are any.

General University Extension is self-supporting in the United States, with many exceptions. For example, Labor Education is subsidized. The participants pay a very nominal fee. Two dollars. There are some activities which do support themselves, because the subsidy is limited in amounts. So, what Dr. Levine does is to spread his appropriated subsidy over a number of activities that can not be self supporting. But beyond that, whatever he does the union must support in terms of the out-of-pocket costs.

The Institute of Management and Labor Relations is supported annually to the extent of roughly \$325,000. The other extension activities support themselves. Professional groups, it is assumed, can pay. Now, when I say support themselves, the income for these activities other than Labor amounts to about \$850,000. In addition, the Institute for Continuing Legal Education is separately budgeted because of a contract with the Bar Association, and spends about \$250,000 a year. In addition, we have also about \$1-1/2 million this year in grants (federal grants and state grants).

In this proto-program we enroll about 12,000 students a year. Some of them may come here for just one lecture, but about 450 take the equivalent of a semester-length course. These are all part-time students. We actually have about 20 people like Professor Levine who are classified as subject-matter specialists. Some of them may do administrative work as he does and those people do a considerable amount of teaching, in engineering, law, etc. We also have under the contract a great many part-time instructors.

QUESTION

I would like to know if full-time personnel are considered part of the faculty of the University?

McMAHON

Yes. Then we also have about five to ten full-time teachers on other contracts. To instruct our 12,000 students in any one year about 100 to 200 lecturers would be from the regular University faculty, who do this as extra work or part of their regular teaching assignments.

QUESTION

Is it difficult to find competent part-time instructors?

McMAHON

The way we find these specialists is through the faculty. We have a program in molecular biology, and molecular biology of viruses. Most of these instructors come from the Bell Laboratories, chemical industries, etc.; and they are identified by our chemistry faculty. The Chairman of the Chemistry Department will tell us which man is best qualified.

QUESTION

Generally speaking, how much time does the average student spend in a special program, taking into account the fact that you have a varied student body. I note some of them have degrees and some of them have a limited amount of formal teaching.

McMAHON

The amount of time one spends depends entirely on each specific situation. Our total student body numbers about 50,000 persons a year in the Extension Division. About 5,000 of them take courses that run for an entire semester; so, the courses are very similar to regular college instruction, the difference being that the emphasis is on application rather than theory--the kind of thing you would do in a technological institute. Another group of students, probably 20,000, take courses which may meet one night a week for six weeks, 12-15 hours of instruction. The remaining 25,000 are wide-ranging. Some of them may be here for only one day. We have, for example, a program now for upper managers of the AT&T. For 13 weeks before they come here, we send them cases to study, books to read, and then they come for two weeks. That is one extreme in terms of time.

QUESTION

People who follow these courses, do they live in New Brunswick, or is it possible that they come from very far distances?

McMAHON

Thirty miles away is Newark. Sixty miles away is Camden. Insofar as possible, we try to build up our activities on these three campuses, because we have more facilities. Now, the problem of travel is not particularly serious for most people. If you take a radius of 25 miles at each Center, this includes a total of 60-80% of all New Jersey's people. In addition, we will go anywhere in the State to conduct the instruction. So, of those 50,000 students, I suppose 30,000 maybe come onto the campuses, and the other 20,000 do not.

I should mention the overnight facilities. The Continuing Education Center houses 72 people, and that is in use almost every week of the year. In addition, during the summer, we use all the dormitories on this campus.

QUESTION

Is University Extension organized autonomously?

McMAHON

I am sorry he asked that because I will answer and there will be no time left for Dean Wheeler. Rutgers University has approximately 16 or 17 instructional units-- University College, School of Education, etc. All of the others, except Extension are schools or colleges. We all report to the University Provost. In general, we are administered the same. We do use the total physical plant because we represent all parts of the University in this Extension Service. Agriculture has its own. We have a practical problem, which Dean Wheeler shares with us. University College also does not have separate science laboratories. So, if we need to use labs, we must have a very close cooperative relationship with the science departments.

QUESTION

I would also like to know whether the departments make arrangements for special courses here.

McMAHON

We have had many foreign teams through the Department of State. They can come from any place. The basic assumption in any extension program is that the actual program development is a joint activity of the University and an association, government or corporation. We think the specific problem is met when we create a committee representing both sides to develop the program and make very specific objectives. The more specific the better. Sometimes there is a general element which I cannot deny. On this basis, we have certain basic principles which will follow. First, the University must make an educational contribution to the program. If we do not do that, we are only in the hotel business. Now, the contribution may be all of the instruction or it may be merely expert guidance in the selection of the instructors. In addition, we must pay the instructors and we do not split these with the other agency. The reason for that is obviously to keep the focus on the education to prevent the use of the University's name by entrepreneurs. Many times in the year, in a week sometimes, somebody comes with the idea that he will put on the entire program, and all we provide is space.

WHEELER

Before I begin my description of University College, I would like to point out that I am only a few months ahead of you in my learning about the College, about Rutgers University, and about New Jersey. I arrived and took this position on the 1st of July of last year. Therefore, I may refer some of your questions to my colleagues here, Professor Levine and Dean McMahon, who have preceded me by many years and know much more about University College than I do.

University College is one of the six undergraduate colleges of Rutgers. It is the College for Adults, who attend on a part-time basis and almost exclusively in the evenings. Our students are almost entirely matriculated, and all the work is done for credit toward bachelor degrees. The premises of the college are that adults, because of their maturity and experience, should have a different approach to their instruction from full-time undergraduate youths. There is an important and rapidly growing field of study in the United States concentrating on Adult Education. Indeed, there is a new word soon to be added to the dictionary known as androgogy, in contrast to pedagogy. Both Professor Levine and Dean McMahon are specialists in this field. They are both Professors of Adult Education in the Graduate School of Education.

University College has approximately 3,000 students. They are located in five campus centers, in the inner cities of five New Jersey cities. It has a separate, full-time faculty in 19 Departments, in addition to which there are a large number, currently, around 300, part-time faculty members drawn from other universities and from professions in the community-at-large. The campuses for the University College Centers are, as Dean McMahon referred to them, largely the campuses of other undergraduate colleges during the day. In two instances, we have our own facilities for University College, where there are no day schools in those communities. Because this program is a rather traditional one, comparable to regular undergraduate bachelor degree programs, and because we are somewhat limited in time, it might be better if we would now turn to your questions for the remainder of our time.

QUESTION

At other universities I hear speak about "university colleges". Does it mean the same?

WHEELER

Not Always; at Rutgers, yes. But at other institutions it depends. The term "University College" is used at a number of other institutions; but there are a variety of names for adult degree-granting colleges, depending on the institution.

QUESTION

You have a difficult problem in operating adult classes, but I think that the youth of today have many facilities where they may study. I think that in another decade most youths will have a neighboring college in which to study. Today, people of 40 or 50 years of age did not have these facilities available.

WHEELER

There seems to be a trend in the United States for undergraduate education generally. The prognosis by experts in general education is that our young people are going to be dropping in and out of the university rather than taking a four-year program. Therefore, many of these people who have dropped out will not want to give up the occupational activities they have when they drop out. And we can see this as a substantially different kind of population than when we began University College 35 years ago.

QUESTION

What I understand about University College is that one is not dealing here necessarily with professional upgrading but in giving an opportunity for adults who are working, who are laborers, or who have other activities, to obtain a university education.

WHEELER

I mentioned 19 Departments. I should specify that all students are required to take most of their work in the liberal arts and specialize beyond that. In addition to which, probably half continue and receive their bachelor degrees in the liberal arts.

In order for one to gain admission he must possess a high school education or its equivalent, in addition to which he must have a certain rank in his class. I myself must add that I am not comfortable with this. Many students have completed high school work perhaps ten years before. They ought to be tested and interviewed in order to assess their abilities in addition to having the basic high school requirements. The majority of our students are transfers from other colleges. At present, there is, and I have no specific statistics, a relatively high dropout rate at the end of the beginning year, which reinforces my feeling that we should have interviews and testing as well as high school requirements. There is no formal way other than their lack of success after admission.

QUESTION

In your system of admission, how do you determine which students to admit?

WHEELER

Historically, we have used open admissions. Let me be specific, at the present time anyone, who has graduated in the upper 3/4 of his high school graduating class, may be admitted. But academic standards must be maintained; and students are dismissed, if they are unsuccessful. There is no difficulty insofar as time is concerned. We have laboratories on Wednesday nights, and on Saturdays.

Inasmuch as you are administrators, I would like to elaborate somewhat on our problem, that is the sharing of laboratory facilities. It seems necessary to me that central administration of the University must very clearly establish a policy that the facilities of the University belong to the university as a whole. This has not been generally true.

II. FACULTY-STUDENT RELATIONS

1. A Mutual Problem

In the early planning stages of this exchange program, many of the towering issues of mutual concern were projected as topics worthy of serious attention by the participants.

The Italians, for example, evinced considerable interest in what American higher education was doing to give students a greater role in institutional policy-making. Fresh in their memories were the prolonged student unrest of 1967-68, when the contestatori occupied 23 of the nation's 20 universities. The aftermath of that student insurrection was the government's decision 1) to open the university doors to anyone completing high school, and 2) to create a Parliamentary Committee to draft a reform bill, to which this report referred earlier.

The Americans were, likewise, interested in discussing campus disorders and the student protest movement but, preferably, in a broader context. Their primary concern was whether the higher education can involve the entire university community in the creation of a climate of civility and accountability. Accordingly, it was agreed to examine ways and means whereby more communication may develop between students and teachers, inasmuch as the pressure for academic reforms has already sparked a movement in America: the return of professors to teaching students, and a renewed commitment to their institutions. In short, how do people within a university, made up of many students, teachers, administrators and non-academic personnel and of many races, creeds and interests, establish patterns of development that are consistent with the goals of the university and each of its constituencies?

Thus, when the Italian Rectors entered into dialogue with the American participants, there was a readiness for a deliberation of change, trends, directions and goals. - - Ed.

2. Human Relationships*

The primary, vital factor of education undoubtedly rests upon the interrelationships between the student and his teachers. This is especially true at the university level, where students are young people who already have acquired a general culture, have arrived at the age of initiative, and have entered the society of which they are an essential part. It is essential, therefore, that the university should be aware of the aspirations and feelings of these young people, if it is to fulfill successfully its mission of discovering truth, not yet revealed and critically evaluating that which is already held to be known.

As we all know, attainment of culture is useful not only to the men of today, but also to those of tomorrow; and it is through its young students, better perhaps than in any other way, that the university can bring about that immediate and continuous contact between science and the reality of life, that is the stimulus and indispensable source of guidance to knowledge. Is it not perhaps from the need to satisfy the demands of life that thirst for knowledge, which drives all, even the most humble, to seek culture, is by nature born in man? And could this culture be acquired, or even sought, if we were not aware of these demands? And who, better than the young, can express these demands spontaneously and without pre-conceptions?

Teaching, which is a reciprocal exchange of experience and knowledge among men, is imparted to others, and is, at the same time, received from others. Its formal expression lies in a two-way relationship: 1) the relationship between him who teaches and in teaching learns, and 2) he who learns, and in learning teaches. In this two-way relationship, all teaching has its roots. Its mechanism lies in a meeting of minds, never in a unilateral act of imposition on others, not in a monologue without an

*Rector Giuseppe Ermini's paper is presented here in a condensed version. It was first read at Seminar I, Dialogue 1 on March 19, 1970, when it precipitated enthusiastic response.

intelligent and receptive interlocutor, nor in a discourse that does not presuppose a request for knowledge, either understood or manifest.

Indeed there is no teacher whose personal experience has not thoroughly convinced him of not only the usefulness but also the absolute necessity of this intimate dialogue between teacher and student!

The Contemporary Scene. With this as our premise, what can we say then about the human relationship that exists in practice between professors and students in Italian Universities? What can we say about the teaching methods in use and, in particular, about the university lecture system?

First, let me emphasize and call your attention to the wealth of meaning in the term "human," included in the title of this dialogue to qualify the type of relationship which must exist between teachers and students.

I am thinking of the automism and the precise and unchangeable play of the elements and forces that ensure the order of the physical world in which we are immersed as man; and I observe, on the contrary, how uncertain and variable in its effects is the relationship that develops in social life between man and man as a result of the different and naturally free personality of each individual. Since teaching is accomplished through a meeting of men and only in this way produces its fruits, it is easy to conclude that the relationship between teacher and student must be and remain "human," a relationship of minds and of hearts: the teacher sensitive at all times to the variable and unforeseeable reaction of each student to his teaching, yet prompt to draw indications for the orientation of his lessons from every sign; and the student, latent on absorbing new knowledge, yet eager to ask what he feels he most needs. Hence, we sense the importance of a scholastic structure and organization that not only permits but actually encourages such a human relationship, and the necessity of teaching methods that guarantee its fullest expression and draw from it the best possible results.

The Rigidity of Tradition. If, with these convictions, we now look at the state of the university in Italy today, we cannot say, with a clear conscience, that conditions are exactly as they should be.

Our Italian universities operate within the limited confines of their autonomy, hemmed in by the traditions of a virtually single, nation-wide system, which entrusts its direction and operation almost exclusively to the decisions and responsibility of the teaching staff, and particularly to the full professors. Under the circumstances, little room is left to human relationships between teachers and students (which differ so greatly from place-to-place and from region-to-region) in the organization of courses or in teaching methods.

So, in practice, the formal lecture in Italian universities, delivered in a subject previously selected by the professor, dominates all other forms of teaching. Nor is the situation very different in the field of scientific study and research, officially conducted in the greatest freedom within the individual institute by the professor and his assistants, and exceptionally even by students, but always in practice under the direction of the former.

Our situation would be quite different, if our universities at a certain moment in their history had not broken away from the ancient tradition that had been theirs for centuries.

In fact, if we open the ancient statutes of our universities as well as other documents of the medieval epoch and the early years of the modern age, we find that, to a large extent, the "University of Students," or the student body, in close collaboration with their teachers, was entrusted with the task of organizing and running university life, establishing its statutory norms, electing the rector and his counsellors from among themselves, advancing at times proposals for the

periodic calling or confirmation of professors, appointing administrative and maintenance personnel, watching over the regularity of courses, and maintaining internal discipline. More directly, with regard to the teaching methods followed, we note that the greatest importance was given -- alongside daily formal lectures -- to seminars and debates. The former were aimed at a deeper examination of points already touched upon in the lectures and often requested by the students themselves, and the latter were run in the form of public discussions among students, among students and professors, and among professors for the purpose of dealing with and solving various questions and problems. These seminars and debates, in set number and in set periods of the academic year, were considered compulsory, as was the organization of special lectures to be given by the students themselves, following the models of their professors, and viewed as useful practice in the teaching functions to which these students aspired.

Nor is this all: according to the old statutes, the schedule of courses and the list of topics or points to be examined in these courses were in general coordinated by the students. Thus, in the documents of the period, we often find reference to the fact that the teacher was held to develop his course ad libitum audientium, or as so pleased the students. As late as the end of the XVI Century and beginning of the XVII, for example, at my University of Perugia, on lecture days, teachers were required to "tenere palestra," that is, to debate publicly with the other professors and students on questions and issues that were proposed, answering everyone "kindly, honestly and wisely."

Nonetheless, these norms and traditions gradually fell into disuse, primarily because of the limitations on freedom of culture imposed by governments of the various principalities; and they disappeared altogether in the Napoleonic University System of the last century, of which we in Italy are the distant heirs.

The Proper Relationship. Thus, I believe that when the student "protestors" of today demand a more direct participation in the government of a university, and when they protest against teaching methods based exclusively on formal lectures, and against what they call the "barrenage" of the professors, what they are really asking -- although they may not realize it -- is no more than a return to the ancient tradition of closer human relations within the university between students and teachers, and consequently to the more effective teaching and study methods that were once proper to our universities. So, seen in this light, their protests and demands in this regard do not seem unfounded.

It is, however, necessary to move out of the vague and general foginess, in which, at least in Italy, the question has remained obscured for too long, and clearly say just how and within what limits the university situation of today can and must be corrected, without indulging in harmful demagoguery and without losing ourselves in the void of abstract and conflicting ideologies. This is what I shall in closing attempt to do briefly, all the more so since, at least in my country, neither the orientation of official circles nor that of public opinion on this problem seems to be very clear.

Within the university community, various human forces, or university components, as they have also been called, namely teachers, students, administrative, technical and maintenance personnel, meet and live together with the same purpose of cultural and civil advancement. It is therefore perfectly natural, and at the same time, highly beneficial that each of these categories be in a position to make the most effective possible contribution to the life of the university, all participating in responsibility for the operation of the organism of which they are a part. But it is also true that the preparation and the proper and recognized tasks of each group within this organism are so profoundly different that a differentiation

in their respective functions is also logical and necessary if we are to arrive at a harmonious collaboration and juxtaposition of responsibilities and effort, such as to ensure that the university will achieve ends and avoid a situation in which so-called "co-operation" in the management of the university leads to an overlapping and confusion of attributions and acts, generating chaos rather than greater order. It is my conviction that to achieve this end in Italy we must follow the very simple road of rediscovering and reviving the ancient traditions of which I have spoken above -- the traditions of that close relationship and joint responsibility between professors and students that were the secret of success of the Italian universities of the past.

It is quite apparent that this will require a reform of present university structures, and, perhaps even more, the development of a new mentality of close human relations among all those who live within our universities. I also realize that this presupposes intelligence and good will on the part of everyone. Finally, and with deep conviction, I am convinced that this goal can be reached only if everyone is persuaded that this is the road to follow.

SELECTED RESPONSES - RUTGERS

ABERNETHY

My Rutgers' colleagues are at a decided advantage over our guests in that they have had a chance to read Professor Frnini's paper. On the other hand, you Rectors have not had an opportunity even to read the thoughts of my associates assembled here.

Yes, we have read the paper and I have taken the liberty of asking Professor Frnini if I might make just a brief comment on his paper, by way of summary, instead of having the paper read. He is kind enough to say that this is agreeable.

I think all of us assembled here notice with interest that student power was very much a reality at an earlier stage of Italian university development. We also note with interest Prof. Ermini's suggestion that progress might be made by reverting to ancient practices. The fact that University students, in close collaboration with members of a faculty, were entrusted with the task of operating the institution is a method that would be warmly applauded by our students. Whether it would be applauded by our teachers is something else again.

Professor Ermini's paper stresses the importance of the human relations factor between students, faculty and administration. In order to provide an atmosphere in which education may flourish, he further suggests that to restore such climate there would need to be a clear distinction between the roles, functions, and powers of a faculty, and the rights of students. Now, in America, it seems to me, it is precisely at this point that the problem is posed, at least for us. Who draws the lines of distinction?

Students in American universities are obviously unhappy over having the limits of their rights and responsibilities established by someone else. By the same token, faculty members are uneasy over student encroachments on their sphere of control. So, the question, who draws the lines of distinction between these three groups, it seems to me, is a matter of real concern in American higher education.

Now, if I had read Professor Ermini's paper before inviting Rutgers and Douglass College students to be participants, I would have included a full-time member of the faculty to be with us. We are not lacking in that category, however, for our participants this morning, Dean Clifford, is also a teaching member of a faculty, and a lecturer in sociology. He is also a Dean who thinks like a faculty member.

I have asked each of the four Rutgers participants of this dialogue to sketch very briefly the functions of the office which he represents in the hope that a picture will emerge of the climate here at Rutgers with respect to the matter of inter-relationships between students and their elders, if not betters.

The first person whom I shall call on is Dean Clifford, the Dean of Student Affairs at Rutgers University.

CLIFFORD

Very quickly let me explain just what my role is at the University.

I assume that you have had sufficient discussion in other dialogues at the University so that you are aware we have campuses at several different locations in New Jersey. At each of these campuses there is a Student Affairs Program under the direction and leadership of a Dean of Students. He in turn has working with him, both specialists and generalists, selected associates in such areas as financial aid, placement, student aid, counseling, housing and residence, student activities, and college student centers. It is his responsibility to work directly with his staff and with the students at those campus locations, to develop a student affairs program that is tailored to the personality and interests of those students.

My personal responsibility is University-wide coordination of the total student affairs effort. To attempt to effect that coordination, we have what is called a Student Affairs Cabinet on which sit the Dean of Students from each campus, including the evening college, representatives of the Graduate Schools as well as the chief Student Government Officer from each of the locations. In addition, for purposes of communication, there are also liaison representatives of the Provost's Office, the academic coordinator of the University and of the Treasurer's office, the financial coordinator of the University.

It may interest you to learn that I am a member of the President's Cabinet. I also sit with the Board of Governors at its regular meetings. My function there is to provide communication and understanding of our broad program of student affairs. In addition, I also teach in our Graduate School of Education a course called "Special Issues in Higher Education," a course which is currently addressing itself to issues of governance and student-faculty relations, our topic of today.

The sociology course, mentioned by the Moderator, is a seminar on the "Sociology of Health and Illness," involving some of the efforts to project the University into the community and to place our students in field experiences.

ABERNETHY

Now, I would like to call upon a student, Elliot Greenspan, who, just a week ago, laid down a position of, shall we say, prominence, if not power in the University. Mr. Greenspan is the editor of our campus newspaper, "Targum." I shall ask him to describe briefly his function as editor of the students' paper.

GREENSPAN

If I may, I would like to discuss two of my roles: 1) the duties of the editor, and 2) the responsibilities of the chairman of the Student Council committee on professor evaluation.

1. The student newspaper on American campuses has had three functions: a) we, like most newspapers, have tried to present the news with some kind of balance--objectively, with both sides of every issue reported; b) we have attempted to be more than the medium of campus opinion, wherein students, faculty and administration could be heard; and c) we have attempted to be a source, a means of campus reform. Personally, I am frank to admit we have not done too well in the last area during the past year.

A specific attempt has been made by the "Targum" staff to involve the city in the student organization, hopefully to bring faculty and students

into a closer relationship. May I add, the response from the faculty has been minimal. This was very disappointing to me.

Last November, I spoke to the Faculty of Rutgers College in my role as Editor; and I made a very explicit appeal, urging professors to contribute to the paper, to submit book reviews, faculty opinion columns, and letters to the Editor. The response, as already stated, was very disappointing. My experience with the faculty, in terms of involvement has been quite disappointing.

2. Let me now explain our efforts to evaluate instruction at Rutgers College.

Two years ago, a Student Council Committee on Evaluation of Instruction spent a few months drawing up an evaluation instrument or rating form to serve in judging all instruction within the college, and then to process results in a computer run off.

We expanded and perfected our effort of the first year evaluation by repeating the process and by publishing this report for student use. The purpose of the evaluation, in my judgment, was to improve the quality of teaching within the college by revealing to professors the judgments of students as to their effectiveness in imparting knowledge, and 2) an attempt was made to give students in the College maximal information on how their peers rate course offerings of each faculty member. The evaluation manual is available to all students and is utilized during registration when they need to elect courses.

I note several of you are interested in obtaining copies of the manual on evaluation of instruction. We shall attempt to provide each Rector with a copy before we adjourn this morning.

CROCFY

I am one of the operational Deans of Students, whom Dean Clifford referred to in his comments.

I have responsibility at Rutgers College for financial aid, the student health program, placement services, student counseling, and for this Student

Center, in which we are convened, - - its operation and programs. The director or staff in charge of each of the areas enumerated meet with me regularly to discuss ways of working together for a purposeful, unified program for students.

In most of the areas mentioned, there are student-faculty committees that are responsible for formulating policies. One of these committees, for example, has to do with the residence program. The committee chairman is a student; and there are also three faculty members, three students, and the University administrators (without vote). The committee has responsibility for the dining halls, the residence halls, and for the staff in the Dean of Students Office.

During the past year, one of the major concerns of the Residence Committee has been to review and propose policies by which eligibility to live in a residence hall was given to students in different categories and levels. More specifically, we currently have at this campus only 3,000 spaces in residence halls. There were approximately 4,000 student's requests for space. Since there has been no possibility to increase the number of residence halls by next September, it will be a continuing problem of trying to decide which individual students among the 4,000 should have priority space. That policy statement was formulated by the student-faculty committee. Its proposed modifications will be reported by the Dean of the Faculty this afternoon to the entire faculty, to be convened in regular session. It is anticipated that the Faculty will endorse the policy recommendation without amendment.

In all of the other areas in which my office has jurisdiction there are similar student-faculty committees, each of which is illustrative of the modern approach in American higher education to foster student-faculty relations.

ABERNETHY

We have left Miss Sue Bernstein to the last. She is President of the Student Government Association at Douglass College, the women's liberal arts college in the University. Thus, she is in a position to speak for her college.

BERNSTEIN

First, I should point out that student government at Douglass is best called cooperative government. It involves both faculty and students.

The faculty at Douglass meets separately and is not open to the student body. Our Student Government Association is unlike that at Rutgers and Livingston Colleges in that it has jurisdiction in non-academic affairs and in all matters affecting the student body. In the area of academic affairs, it has direct control of academic honesty. The legislative body in our government association is the Assembly, consisting of students, faculty members and a representative of the Dean of Students Office. Our Assembly has the power to enact legislation within the limits of jurisdiction given to the Association. If legislation is enacted it is subject to review by the Dean of the College. In matters that do not fall within the jurisdiction of the Association, it has the power to recommend action to the Faculty or to the Dean of the College. Our Assembly also allocates student activity fees in keeping with a program adopted for the year. This year the fee is \$17.00 per student.

Within our Association are 30 to 40 separate committees, the majority of which are student-faculty in membership. Students are usually elected chairmen of the committees created by the Assembly. We also have student representation on most of the committees created by the Faculty, such as the admissions committee, scholarship committee, and long range planning committee. These students are nominated by the Association and approved by the Assembly.

We also have at Douglass a Judicial Board that is responsible for handling all violations or offenses, such as cheating, stealing and lying. This Board

also has representatives of the Faculty and Administration. Because we have an honor system, which means that each student agrees to accept the responsibility for maintaining the regulations, accepting them in course, and modifying them through due process when necessary, we have no proctors during examinations. Thus, a student may report himself or others do so, if there has been a violation of the regulations. The Judicial Board hears every case reported, individually. There are no established penalties or punishments in that the Judicial Board decides what it deems best in each instance.

The decisions handed down by the Board are viewed as educational and individual. For example, some of the decisions require the writing of a paper; it could be suspension from college; it could be expulsion; or it could be "no action." However, if suspension or expulsion is the penalty recommended, the Board's decision is always subject to review by the Faculty Council. If the Council does not concur, the case is turned back to the Board, in which case its decision is final. The student has, in event of appeal, the right to request the Dean of the College to review her case for a final judgment.

THE RESIDENTIAL COLLEGE*

I.

The Nature of the Residential College. The Residential College is difficult to describe in a way that will help a reader imagine himself in it, for "it" is no it. No statement of purpose, no list of academic or social rules of the game, no catalog of courses, and no description of pedagogical technique can begin to convey what the College is, what is the heart and life of it, or how being a student in it is a special experience.

People who come to the Residential College usually are caught up in it. Caught up, they find themselves involved in it this way and that, doing and trying, beginning and joining in. This world of people, individually caught up and caught up together, is the Residential College in its uncapturable essence.... The College is no bifurcation of life, but rather an invitation to people to discover themselves in the everyday world and in the usual workings of formal education, here enveloped by the everyday world.

A lesson of the first years of the Residential College's life is that there are various paths to wisdom, countless byways for healthy intellectual activity, and room enough in a contemporary college for a person to discover both himself and a full life, and all this happens best when it happens together.

The Residential College Idea. The Residential College attempts to overcome size and impersonality of multi-university while, at the same time, thriving on its diverse potentialities. It is a small, four-year liberal arts college in the middle of a

*During their scheduled visit to The University of Michigan, the Italian Rectors were provided an opportunity to meet informally with Dean James H. Robertson and selected members of the Residential College faculty for a mixture of serious discussions about educational issues in general and about the Residential College in particular. This summary description of the Residential College was excerpted from two documents supplied by Dean Robertson. These are a) the latest issue of A Supplement of the Announcement of the College of Literature, Science and the Arts, 1970-71 and b) "The Fourth Annual Report of the Residential College, October, 1970."

cosmopolitan university and city. The College tries to give its students the elbow-room they need to explore the world of ideas and to examine themselves and, in the process, experience a substantial and satisfying education...

A curriculum of intellectually provocative courses is the basis of formal education in the College. These courses are taught ... where the instructors who teach them have offices. The building... provides ample room and comfort for both formal and informal education: conversations among students (sometimes with the inclusion of faculty) and ideas encountered in class and, often, using such ideas and concepts to get at new ones. Education in the Residential College, therefore, is not merely a compartment; rather, education is coextensive with the people experiencing it, and these include faculty as well as students.

The Students. The College very deliberately selects a freshman class that is, in its abilities, a cross-section of a typical freshman class in the College of Literature, Science, and the Arts, and, in the process, the College tries to admit as diverse a class as possible. Furthermore, since the Residential College does not want to admit more students than can be absorbed into its program, admissions practices are cautious regarding number.

The Residential College hopes to graduate students who have been able to be independent and who use their independence with consideration of others. The faculty and administration, to this end, provide what help and advice they can, aiming to be fraternal rather than paternal. The College does not see itself in loco parentis but assumes, rather, that responsibility must be given before it is likely to be accepted.

The Faculty. The members of the faculty of the Residential College hold joint appointments in departments of the College of Literature, Science, and the Arts and in the Residential College. The faculty is a body of people interested in teaching undergraduates in conditions that allow innovation and relatively small classes. Usually, an instructor will teach for a term or two or three in the Residential College, then return full-time to his department and to research, perhaps coming back to the Residential College some future term. Consequently, although the college is small, there is a good deal of variety in the teaching staff and, therefore, in the ideas the instructors bring with them.

The Community. The Residential College community tries to give people room to change, and the community is people who maintain the College in continual change toward the good....

The Residential College community is foremost an intellectual community and after that a personal community. It tends not to limit people but rather to draw out of them what and who they can be, from the intellectual to the personal. The community is co-extensive with the College, and community, essentially, is being able to do more together than one can do alone.

The College Curriculum. The Residential College's curriculum is not a string of courses to finish the education of the young gentlemen or lady, no irreducible body of information minimally necessary to the "educated" man. Rather, the courses invite attention to intellectual practices and traditions that are likely to give a student perspective on himself and his world so that, discovering the potentialities given to him, he can prepare to enter this world in some way satisfying to him. The shared responsibility of everyone in the fashioning of the Residential College and in its continual renewal, not the core curriculum alone, reach toward this goal. The

courses, therefore, need to be viewed in the context of the whole life of the College. Though each of them is a discrete experience with the focus of its own, each and all, because the Residential College is residential, enrich the everyday, non-academic milieu and deepen its community.

Graduation Requirements: Graduation requirements now in force are as follows:

A student needs to complete 32 units of work ... at least 12 of which are Residential College courses, at some time ... before graduation. These courses need to include:

1. Freshman Seminar
2. An arts practicum
3. Foreign language through the readings course
4. Three natural science courses-- two of them in one department..., one of them a lab course.
5. Independent study is highly recommended, but not required for the degree.
6. Three social science courses, including two courses in one department and a third course in another department, and three humanities courses, including two courses in one department and a third course in another department.
7. A concentration program chosen from among regular Literature, Science and the Arts and Residential College programs, or an individualized concentration in the Residential College.
8. Finally, a student's over-all average must be "C" or better in both his concentration program and in his total course work, and he will need to have completed at least 80 hours outside his concentration work.

The Freshman Program. Freshmen usually elect a program of four courses each term.

The selection of specific courses is made with the student's academic adviser.

Students elect their first term Core 100 Freshman Seminar, and three other courses-- one of which should probably be a foreign language.

foreign language. The College views proficiency in a foreign language as an intellectual instrument of the highest value as well as an intellectual objective in its own right. Upon admission most students will have had several years of preparatory study in one of the foreign languages taught in the Residential College -- French, German, Russian, Spanish, or Italian-- and a few will already have achieved proficiency....Whatever a student's level of skill, he may follow either of two paths to acquire proficiency: he may elect an intensive (double) course in his language in the Residential College, or he may pursue his language at a traditional pace in the language department in the College of Literature, Science and the Arts. In either event, he must pass a proficiency examination in French, German, Russian, Spanish, or Italian sometime between his admission in to the College and the middle of his senior year.

The Freshman Seminar. Required of each freshman during his first term, this seminar is conducted in twelve-student sections, each meeting independently under the direction of a faculty member of full standing in the College of Literature, Science and the Arts and the Residential College. Each seminar may be viewed as nearly a course in itself inasmuch as it explores a number of books--some of them "great"--selected by the instructor with sole reference to the principle that he deems their study an orientation to the kind of thinking expected of serious students. Each instructor does, however, accept two propositions that bring some things in common to each section. First, he is expected to address himself to his readings as a generalist moving beyond the confines of one academic discipline or speciality. Second, he is expected to call for a more customary amount of written work and to examine this work with an eye to its quality as English expression as well as to its subject matter.

II.

Fourth Annual Report of the Residential College*
A Faculty Committee Appraisal:

Student Numbers. The Student body of the Residential College now (October 1970) numbers 742. Our entering freshman classes have been as follows: September, 1967: 217; September, 1968: 251; September, 1969: 238; and, September, 1970: 275. Total admissions to date come to 931. Of these, 239 have left the College for varying reasons. Some have been asked to leave because of unsatisfactory scholarship; several dozen have left the University (many temporarily) of their own accord; the largest single group have transferred to other units of the University (approximately 80). This spring we expect to graduate from the Residential College approximately 120 students from those who entered four years ago. Since additional members of the first freshmen class will be earning degrees in LSA, the percentage of graduates will be over 60%. The national average is somewhat below 50%.

Of the 742 Residential College students, some 575 reside within the College complex in East Quadrangle. Freshmen and sophomores are expected to reside there; a heartening number of juniors and seniors have chosen to do so....Partly as a result of this, approximately 170 non-Residential College students also live in East Quadrangle. We note with interest, however, that a number of juniors, after having lived in apartments last year, have returned to spend their senior year in the College. In the next year or two we hope to have East Quadrangle fully occupied by Residential College students.

With the physical plant of the College now virtually complete, we have living

*This section of the report of the Residential College is an excerpted account of its present condition and prospects. "The Fourth Annual Report" of the College was prepared by a faculty research group under the general supervision of Professor Theodore Newcomb, Associate Director of the Residential College.

accommodations, much varied in kind, for 750 students... Future freshman classes should be adjusted in size so as to keep the total student body under 1000. Beyond that figure the important advantages of a small community, upon which the College has capitalized, may be endangered.

Character of the Student Body. The profile of the Residential College student body is unavoidably skewed somewhat, however, by the nature of the enrollment process. Only those are enrolled who opt for it. Although the number who do so has always greatly exceeded the number of available slots, the process of partial self-selection does tend to screen out students with interests of certain kinds: those who do not plan to follow a four year undergraduate program; those apprehensive about the College's educational experimentation; its somewhat stiffer curriculum; its higher expectations for individual responsibility for learning; or those who prefer the anonymity possible in the much larger College of Literature, Science and the Arts....

Ongoing research continues to confirm the conclusion that Residential College students tend to resemble honors students more closely than they resemble other LSA students in intellectual dispositions, in having similar preferences for independence, and in intellectual and personal openness. Research reveals further that the Residential College students have a marked tendency to adopt esthetic and creative approaches to learning.

The Residential College Faculty. Faculty members in the Residential College hold appointments in some academic department of the College of Literature, Science and the Arts, or, in special cases, in other units of The University of Michigan. This mode of joint appointment continues to create some problems but it remains an important principle of the College, protecting and insuring the high quality of

of instruction in Residential College classes. Those attracted to the Residential College from among the Michigan faculty, are often those likely to be more experimental in temper, anxious to develop closer, more intensive relations with undergraduate students. As a consequence of this self-selection, the faculty are deeply committed to good undergraduate education, innovative in spirit, willing to give freely of their time outside of the classroom.

Faculty Members. For the Fall term, 1970, there are 85 persons holding teaching appointments (mostly part-time) in the Residential College. In the Winter term, 1970-71, that number will drop to approximately 70, because of the nature of our curriculum, which happens to require more faculty in the fall term....

Many faculty members, once having taught in the College, usually take much satisfaction in remaining a member of the College community, even during a subsequent term when they have no teaching appointment within it. They continue to be active on College committees, in the informal life of the College. Many University faculty members having no official connection with the College participate in its intellectual life by giving special lectures and informal seminars, by sponsoring independent study projects, by giving informal counseling....

Class Size. Small class size is a value the Residential College has sought to preserve, but the growth of the College, and the changes arising in the College curriculum, have made it difficult to maintain the smallness of classes for which we have striven. Closeness and informality in student-faculty relations, intensive foreign language instruction, and thoughtful evaluation of student work demands small classes....

Summary of Student Interviews. While satisfaction with their Residential College experience in general is relatively high, satisfaction among students with the core curriculum is strikingly low. The source of this dissatisfaction seems not to rest with the basic rationale of the core curriculum or with the faculty available to present it but rather with the specific implementation of the concept in a set of required courses. The required nature of the curriculum together with the experienced inadequacy of many of the courses themselves has led to student discontent and disenchantment....

...The Residential College as a whole is characterized by a great deal of student freedom and responsibility and this finds expression in the individual courses as well, where students are often able to work independently in areas of their special interest. Yet the required nature of the curriculum is often viewed by students as inconsistent with the entire spirit of the college and thus becomes a point of contention...

Curriculum Development. Curricular matters are of the first importance; they are therefore constantly under discussion, and constantly undergoing change. We would not have it otherwise....

Since all students in the Residential College now pursue the B.A. or the B.S. degrees some concentration program is essential for each...A small but significant number of students pursue concentrations tailored to their individual needs under the direction of faculty members specially enlisted for that purpose. In this endeavor, again, small size permits what we think to be a rather high degree of success and satisfaction.

Opportunities for independent study have been one of the overriding values

of the Residential College from its inception. To advance this objective we have encouraged and supported a host of independent study courses, under the direction of faculty members both within and without the College. To date, some 193 independent study courses have been applied for, some 145 completed, with 16 still in progress. Our experience with this program has been mixed, but generally happy. For many students the task of developing an independent study unit for approval, and pursuing it without continuous supervision, is an intensely valuable experience. It is often observed that some such students do more reading, writing, and careful thinking than normal courses would demand....

The Residential College in Time of Special Stress. So much attention has been recently focused upon disorder, conflict, and turmoil of different kinds on American college campuses that, it is well to ask what response the Residential College made to last spring's turbulence on our campus.*..Over much of the campus buildings were closed, classes disrupted, windows broken, individual students and faculty members (on both sides) threatened and disturbed. In the Residential College at that time an overwhelming majority supported--after lengthy and heated discussion in formal and informal community meetings -- the demands of the black students and faculty. As an institutional unit the College spoke in their behalf, and acted in their behalf by stopping formal instruction in the building. Many have noted that, if formal instruction stopped, informal learning progressed, at a rate and intensity rarely reached in quieter times. What was most interesting, however, was the contrast between the atmosphere in the Residential College at that time, and that in

(*During the week in April, precisely when the Italian Team arrived in Ann Arbor, the University experienced a major demonstration, initiated by the B.A.M. (Black Action Movement)--ed. note.)

other quarters of the University. Although sharp and heated debate continued the College experienced no disorder, no violence or slightest threat of it. Unhappy members of the College there were -- but the civility and decency of relations have probably exceeded those of normal circumstances, while elsewhere the reverse was true....

Problems of Student Evaluation. One consequence of our present methods is that Residential College student transcripts, although containing a great deal of information about the quality of the work done, do not lend themselves to statistical treatment, do not neatly fit the categories traditionally employed by graduate and professional schools, and other institutions, for the screening of applicants for admission, awards, and the like....

A number of colleges have begun to employ pass-fail systems of different sorts, and receiving institutions have been obliged to make some adjustment in their techniques in consequence. What the ultimate outcome will be, for all parties, is unclear; there may have to be some give on both sides....

Whatever difficulties are encountered do not come unanticipated by faculty and students; the entire community has been made fully aware of these difficulties and has discussed them at extraordinary length. After such discussion the College community has repeatedly reaffirmed its determination to maintain a system of evaluation honestly believed to be more conducive to good learning and self-directed growth....

How are honors to be awarded if at all, and how are fair judgments to be made when Residential College students and non-Residential College students compete for scholarship awards, financial assistance, and the like? These are really tricky issues; to find solutions that are at once fair to all concerned, and still do not compromise the avowed principles of the College, is not easy.... Future controversy in this sphere, however, is surely to be anticipated.

Problems of College Governance. The three-year history of the College in community governance justifies the mutual confidence on which it rests.... This sense of social responsibility has depended upon a delicate balance of authority, and its exercise, among the students, the faculty, and administrators in one sphere, and in another, between the Residential College as a whole and the College of LSA as its parent unit...The second of the two balances mentioned above, therefore, might best be protected neither by tightening control, nor by separating the units, but by lubricating the joints between the two. Lubrication may be a happy step before friction creates too much heat.

Concluding Remark. Not all our efforts have been fruitful as we had hoped--but on the whole we think the experiment to date has proved successful from the point of view of our students and faculty of course, and, we hope, from the point of view of the University as a whole. Judging from the steady stream of inquiries and visits from faculty and administrators and students from all over the country, this College is serving as a model for undergraduate experimentation nationally....

VII. MISCELLANEA

INTERCHANGE OF STUDENTS AND FACULTY MEMBERS BETWEEN ITALIAN AND AMERICAN UNIVERSITIES

1. Development in the Social Sciences*

I should say, to begin with, that I cannot pretend to be expert on exchanges. I have not personally been involved in any student or faculty exchange program between Italy and the United States, nor have I myself had an opportunity to teach or to study at an Italian university. My knowledge is, therefore, second hand, derived from reading and from conversations with social scientists in both countries who have greater experience than I with the problem. It is, however, a subject in which I am much interested and about which I would like to learn more. But I must ask you to excuse me if some of what I have to say should appear to you inaccurate.

In many respects, the problems are the same in the social sciences as in other fields; but it seems that the encouragement of a greater flow of students and faculty between Italy and the United States may be both more difficult in some respects-- and in other respects more promising --in the social sciences than in virtually any other academic field.

Let me start with the difficulties. The major problem, on the American side, is that there are relatively few social scientists with a special interest in Italy-- a professional interest. History, to the extent that it can be considered a social science, is the exception-- but if one considers the central social science disciplines of sociology, economics and political science, one can name only a small handful of men whose research and teaching has to do with things Italian. One consequence of this fact is that aside from those fortunate individuals raised in Italian-speaking families, there are few American social scientists who know Italian and who might be capable of teaching in an Italian university. As a language, taught in American universities, Italian unhappily ranks well below such other languages as French,

*A great variety of topics were discussed at the Washington Seminar on April 13, 1970. Professor Donald Blackmer of M.I.T.,^{WJC} Co-chairman of the Council for European Studies, consisting of representatives from eight American universities with programs in European Affairs. Dr. Blackmer's condensed paper follows.

German, Spanish and Russian in popularity. A second consequence of the scarcity of senior social scientists concerned with Italy is of course a corresponding scarcity of younger ones-- deficiencies of this sort tend to perpetuate themselves from generation to generation.

To strike a more hopeful note, however, this situation seems quite clearly to have been changing for the better in recent years. For a variety of reasons, some concerned with events in Europe and some with trends in the American academic world, there has in recent years been a considerable revival of interest in European affairs among social scientists of all disciplines. I know personally about a dozen young political scientists and sociologists, for example, who have chosen to write doctoral dissertations on some aspect of Italian political and social life within the last three or four years. I am sure there are many more whom I do not know. These young and well trained social scientists, together with the professors who stimulated their interest in Italy, are the nucleus of a small community of people who may potentially be available for exchange arrangements in the years to come. They will be likely, moreover, to awaken in others a similar interest in the Italian scene.

Now let us look briefly at the other side of the coin, the situation confronting the social sciences in Italy itself. Italian universities have not, it must be said, been hospitable to the development of modern social science. The reasons for this are obviously complex and you know and understand them far better than I can hope to do. I realize that the question is not only a complicated but also a controversial one and I do not intend to enter into the merits of the case. What I can say with some confidence is that the possibilities of exchange at the faculty level in the social sciences will be exceedingly limited until such time as Italian universities are able to create broader opportunities to teach such subjects as economics, sociology and

political science as they are being taught not only in the United States but in many other parts of the world. As far as I am aware there is only one program in the social sciences in Italy in which a substantial number of American professors have participated on a regular basis-- this is the program of graduate training in economics, sociology and political science developed in Milano, Torino and Ancona under the auspices of the joint Italian-American committee called COSPOS, Comitato per le Scienze Politiche e Sociali. These programs have, as you know, been established outside the regular university framework.

The opportunities for sending American professors and students to Italy to participate in teaching programs have been rather limited, although it may be hoped that the university reform will steadily improve the situation. As mentioned earlier, there are likely to be a growing rather than a declining number of Americans interested in conducting research projects of one sort or another in Italy.

But what of traffic in the other direction? At the professor level, the number has been limited for the reasons mentioned above to a very few distinguished scholars like Professor Sartori of Firenze in Political Science and Professor Pizzorno of Ancona in sociology. At the graduate level, the number has undoubtedly been considerable, but I do not have any figures. If data are available on the number of Italian students studying in this country at the undergraduate and graduate levels, I would be interested in seeing them. My suspicion is that there may be quite a few in economics-- since the demand for skilled economists is relatively high --but rather few in political science and sociology. On the other hand, one can get generally better training in economics in Italy than in the other two fields. In any event, the question merits research and some thought as to ways in which the flow of Italian students, particularly graduate students, to the United States could be increased.

This could be one way to speed up the growth of the social sciences in Italy itself.

Let me say, finally, that the social science community in this country is genuinely concerned with problems such as these. As one illustration, I might mention an organization that will shortly come into existence. Called the Council for European Studies, it is being created by social scientists and historians from eight of the leading American universities in European Affairs in an effort to improve the quality of our research and training programs in this field. As it happens, Professor Raymond Grew and I are its co-chairmen for the first year. Among the activities this group proposes to is to help find opportunities for promising younger European social scientists to come to the United States to do research and receive graduate training in this country; for our resources are limited, we hope to be able to provide funds to a small number of such persons in the initial process. We would like also to find ways to assist in getting European scholars to come to the United States to teach in European universities. I hope that Professor Grew will have a chance to talk with some of you in greater detail about ways in which the Council for European Studies -- which is the first organization of its kind to be specifically devoted to the development of social science research and training on and between the United States and Europe -- can be useful in the Italian context.

PROJECT CRITIQUES

A. Commission's Report on "University Project"*

One of the most important undertakings of the Commission during its many years of existence -- one which should have Italy-wide long-range effects -- was carried out during this year of great financial hardship: the University Project, which had consisted of a visit to the United States of an Italian team of six University Rectors, three professors and the Secretary of the Conferenza dei Rettori, for a period of one month, and of the return visit of an American team of six, of which only one was a University President, but two others were to play an important role, being members of a recently-established Council on European Studies which would be responsible for planning exchanges between American and European universities and trying to iron out difficulties.

The visit to the United States had been very successful, as borne out by the report by the President of the Conferenza dei Rettori, Professor Alessandro Faedo, who had taken part in it. It appeared that although several members of the team had already visited the United States, none had really had an opportunity to study and discuss in depth the American university system which only this time had been learned and understood properly. In his report to the Minister of Public Instruction, Professor Faedo emphasized the many positive aspects which the team had observed in American universities and made recommendations for the adoption of certain systems and procedures in Italy.

The return visit by the American team had taken place in June and had lasted fifteen days. The team was enthusiastic about the reception found at each university included in the itinerary, the universities being those whose Rectors had participated in the U.S. phase of the project.

The Italian program had ended in Rome in coincidence with plenary sessions of the Conferenza dei Rettori to which the American team was introduced, and culminated with a meeting devoted to concrete proposals for Italian-American exchanges.

* Excerpt of Report, Prepared for the Commissione Americana Per Gli Scambi Culturali Con L'Italia, Roma, by the Standing Conference of Rectors of Italian Universities, Convened in Rome, June 24, 1979.

6. REPORT ON THE VISIT OF A DELEGATION OF ITALIAN RECTORS AND UNIVERSITY PROFESSORS TO THE UNITED STATES *

From March 15 to April 15, 1970, a delegation of Italian Rectors and University Professors visited some American universities under the auspices of the Department of State to discuss with U.S. experts the most important aspects of both American and Italian university life.

The Italian delegation was composed of:

- Prof. Alessandro Faedo - Rector of the University of Pisa and
President of the Permanent Conference of
Italian University Rectors;
- Prof. Tito Carnacini - Rector of the University of Bologna and
Vice-President of the Permanent Conference
of Italian University Rectors;
- Prof. Mario Rella - Rector of the University of Pavia and
General Secretary of the Permanent Conference of Italian University Rectors;
- On. Prof. Giuseppe Ermini - Rector of the University of Perugia, former
Ministry of Public Instruction;
- Prof. Gustavo Vignocchi - Rector of the University of Modena;
- Prof. Giuseppe Vaccaro - Dean of the School of Engineering of the
University of Rome; and
- Prof. Pietro Prini - Full professor of History of Philosophy
of the University of Rome;

* This is a translation of the Report, prepared by Prof. Alessandro Faedo, President of the Permanent Conference of Italian University Rectors for presentation during the Final Session of Phase II of the University Exchange Project convened in Rome on June 24, 1970. Present, in addition to all members of the Standing Conference of Rectors of Italian Universities, were the six American Participants: Profs. Blackmer, Grew, Harp, Fane, Thione and Wilkens.

The Italian delegation had the opportunity to study the structure and operation of some American state and private institutions. In this report I should like to discuss the more important problems that have a bearing on Italian university reform.

1. Legal Recognition of U.S. University Degrees.

In the U.S.A., university degrees awarded by the various institutions do not have any legal value; an examination of the level of preparation of a student during his university studies is ascertained-- for those who want to enter a particular profession --by state board accrediting examinations (some of which are administered at the federal level).

These examinations are quite difficult and comprehensive. They include a great number of tests prepared by experts who are able to evaluate the seriousness and the extent of the candidate's professional preparation.

These tests are usually graded by a computer: for this reason and because of the number of subjects covered by the examination the possibility of error is almost nil. Moreover, this procedure permits a simultaneous examination of a large number of candidates with an arbiter-- the computer --that does not accept special recommendations.

Some professions do not require state examinations; a young man's future might, therefore, depend exclusively on his qualifications and on the type of studies which he has chosen and pursued.

In Italy, due to the recent liberalization of the plans of study, discussion of the abolition of legal recognition for university degrees can no longer be postponed. The new proposal to establish state examinations--which might also be open to candidates who do not have a university degree --would be a guarantee of seriousness and impartiality.

Here are some of the advantages this new procedure would have:

- a) Instead of studying for a piece of legal paper, a student can obtain a different order of instruction in harmony with his own skills and in function with the career opportunities offered to him by society;
- b) Some compulsory subjects would be abolished on the grounds that they are outmoded and the students could choose to study different subjects which now seem more suitable to their needs.

If the legal value of the present university degree were maintained and the plans of study (under law 910) were simultaneously liberalized, those students who merely wanted legal recognition of a degree, would select only the easiest courses whether or not they were useful and meaningful.

The attempt of university teachers to withhold authorization for new plans of study might create serious problems and be used as a pretext for some teachers to reject study projects of genuine scholarly value that they might for some reason consider a threat to their own academic prestige:

- c) The faculty could well devote itself to more effective and valid methods of teaching, and more effectively help those students who are seriously motivated to further their studies.
- d) The university will be continually stimulated to provide more adequate professional preparation by keeping up with scientific and technical advancement and not waiting for a "deus ex machina" to change the curriculum. In fact, only by abolishing the legal value of university degrees, can we give the university full independence in teaching. Student interest and appreciation of studies and research can be increased through the contribution of the opinions of visiting professors.

I believe that the provisions which have been made for the liberalization of law #910, which will be included in the reform, could be better exploited if the legal value of the "laurea" were abolished. Our opinion is based exclusively on consideration of the greater advantage that will accrue to future generations through the guarantee of increased social justice instead of what passes today as more acceptable or popular.

A bright young man, without sufficient economic means, can better exploit his natural gifts if university studies are liberalized so that he can better demonstrate his own talents.

Instead, the over-all uniform planning of university degrees at a national level puts all students on exactly the same level once they have received the degree, leaving unaltered the socio-economic differences that an open course of studies might radically change.

2. Varying Levels of the University Degrees in the U.S.A.

In the U.S., there are three levels of university degrees:

First degree (Bachelor's Degree) (lower than our usual degree) with which, except in medicine, one can enter a certain number of professions. In this case one may study for the next degree immediately or postpone it even for several years (see 6 below).

Second degree (Master's Degree), the equivalent of a good Italian laurea, with which one can enter all professions at any level. This degree is awarded after one or two years of further study.

To obtain these two degrees, the student chooses with a wide margin of freedom his own plan of study. Each course represents a certain number of credits. It is necessary to obtain a total number of 30-35 credits to obtain the degree.

Third Degree (Ph.D.), which represents a certain advancement in scientific research in extremely specialized areas. It is awarded only after the candidate

has shown that he can perform independent research work. It usually takes from three to seven years, after the Master's Degree, depending on the subject, to obtain this degree.

Many graduate students are employed (stipends are paid through scholarships and fellowships) as instructors of undergraduates.

These instructors live in direct contact with the younger students and provide a continuity between students and professors.

3. Independence in Teaching, Research, and Organization; Departments.


If the study program in Italy were liberalized through the abolition of the legal value of degrees, it would be necessary - - to take full advantage of the new possibilities that become available - - to give the universities the great freedom enjoyed by American universities on the scientific, teaching, and organizational levels.

Such independence does not imply the absence of control over the way state funds are utilized. On the contrary, it is to be hoped that this control will become more effective and stimulating as a result of regional decentralization.

Independence on the teaching and scientific level is indispensable if total participation (i.e. not merely professors and students but also representatives of the society in which the university functions) is to be achieved in outlining the goals that the university must achieve and hence the most suitable means to those ends.

Furthermore, independence in organization will avoid the absurdity of giving a faculty (or department, or institute) a standardized organization even when the ends and conditions of one faculty are different from those of another.

The U.S. university department is conceived of as a grouping together of broadly related fields of instruction and research in order to utilize better the means and instruments of common interest, (libraries, laboratory equipment,



There is no sense in our trying to devise a uniform structure. It will be this very independence together with the critical sense developed by all the members and the experiences that they will share that will, case by case, guarantee the best solution.

It will be chiefly the example of greatest efficiency in the solution achieved in one university that will indicate the modifications necessary to make more efficient those universities that wish to progress.

For example, in the U.S., law schools are not organized by departments; rather, they form a single department. Other degree programs organized by departments have other organs of communication in order to avoid splitting up studies and to allow for interdisciplinary studies.

This occurs, for example, in schools of medicine, which join biological and clinical departments and are headed by a dean, who is aided by a small group of representatives elected by the various departments. The dean has jurisdiction over the single departments and their chairmen.

It does not seem that the function of Italian faculty councils, as an organ of interdisciplinary communication, can be replaced by degree-program councils, which do not always have sufficient breadth of cultural interest.

While the problem does not arise within faculties that offer a single degree program (for example, law school), the situation is quite different from those faculties in the sciences and in engineering, which offer several degree programs.

The degree-program councils of the science faculties, for example, will not be able to maintain interdisciplinary contact without an ad hoc organ, which is indispensable today when the sciences have an increasing need to know what is happening in related fields and to understand various idioms.

1. Choice of Professors and Full-Time.

U.S. professors are selected according to less stringent requirements than Italian professors are, and this is justified because of the great number of universities in America and the great demand for college teachers. I became convinced that Italy must get rid of a great deal of the drama involved in becoming a university professor, by abolishing the fixed number of places made available and by organizing a system that will allow qualified young people to get a professorship as soon as they can demonstrate the necessary qualities and ambition.

Because of the need not to lose worthy young candidates and because of the overwhelming need for professors, one must not be too afraid of the risk that insufficiently prepared people may become professors.

There are two reasons why I say this:

a) no system, including the present one, can completely guarantee that less qualified people will not become professors;

b) in a departmental system, every professor will find proper employment in teaching or research in accordance with his special aptitudes. Therefore, considerations of the scholarly achievement of a professor cannot represent the only criterion if one is to achieve a successfully functioning department.

There are cases of people who are extremely qualified on the scholarly level and actually pernicious when it comes to teaching. It must be understood that the man who has proved himself adequate on the scholarly level but is an excellent teacher is equally useful to the life of a university department.

United States professors are genuinely full-time and are forbidden to engage in any other professional activity outside the university. This is true even of clinicians who are strictly salaried employees. Professors whose subjects are suitable to other professions are

usually hired on terminal contracts, renewable or not renewable, depending on either the university or the professor.

A guarantee that the professor will not engage in outside activities is provided not only by personal ethics but by two basic factors:

a) the excellent salaries offered to professors.

Salaries vary according to the individual excellence of the professors and are sufficiently ample to provide a certain amount of comfort and to allow a professor to cultivate his special studies. At the same time he enjoys undeniable prestige in comparison with those who are engaged only in a profession.

b) the excellence of tax system. Nothing can be omitted from U.S. tax statements, and since taxation is progressive, it is not economically advisable for a professor to engage in outside activities. His additional earnings would simply go for taxes.

The excellent tax system is helpful in another way to American universities, be they private or public: voluntary individual donations to universities are encouraged by the fact that donations and bequests are tax deductible.

There are also part-time professors, especially in professional subjects:

The terminal contract for professors also leads to frequent moves.

When a professor finishes his contract at one university, he may sign a new contract with another university. This functions well in the American university market because there are so many universities. It is doubtful whether it would work in Italy, where almost all universities are state-run and the possibilities of moving from one to another are very limited.

For economic reasons and because of the impossibility of obtaining -- notwithstanding the broadening of criteria of selection -- a satisfactory number of professors to meet the continuing increase in the number of students, one

must pay particular attention to the possibilities offered by new technological devices to increase the efficiency of teaching (see 7 below).

5. Visiting Professors.

It is very common practice in the United States to invite well-known foreign scholars to teach for a semester or more in the universities. Visiting professors may even be offered contracts running up to three years or more. Visiting professors are paid salaries comparable to those of American professors. There are a great many advantages, both for opening new fields of study and initiating the young ones in these fields (which cannot be done if foreigners are merely invited for brief series of lectures) and for establishing an international standard of scholarly dignity, which can stimulate local professors to new research and offer an international forum to judge the validity of the results achieved. This forum, together with student interest, provides a surer guarantee against the stagnant pools that sometimes form even in the liveliest academic circles.

The formation of "open" chairs available even to foreign citizens would be an important step in this direction. Furthermore, in order to increase faculty appointments, which are still inadequate, and to improve scientific and scholarly standards, it would be necessary to abolish the requirement of the Italian citizenship. Such a limitation, especially in more advanced courses, has often given negative results.

New type of Financial Assistance.

During the last few years, aside from the usual type of financial assistance, i.e. fellowships, grants, etc., awarded on the basis of scholarship competition, steps have been taken to make university education available to a larger number of students.

Evening courses and short-term courses are offered to working students, under the joint sponsorship of the university and the firms where students are

employed. Refresher courses for young professionals in line with the principle of "continuing education" are also offered so that their education can be furthered in the future rather than terminate on graduation. This project is sponsored by individual universities in cooperation with big industrial concerns or professional associations.

In addition to fellowships, students might be awarded "honor loans" in the amount of varying sums of money bearing no interest. The students will refund these sums in installments during the years following their graduation.

This proposal, which will soon be adopted on a large scale according to a new bill presented last month to the Congress, has considerable advantages compared with the traditional type of financial assistance:

- a) It is a more dignified type of loan.
- b) It makes it possible to help a large number of students and meet a demand which certainly will increase in the future.

If a university is in a position to offer a high level of instruction, the students can be expected to express their gratitude by establishing a closer cooperation between the alumni groups and younger students.

A private institution, such as Columbia University, receives a contribution of about \$2,000,000 per year from former students as an example of "gratitude."

Many American universities in these last years have taken the initiative in encouraging students who, although intellectually gifted, have limited financial means.

A very interesting initiative (about which I could give further details) has been taken by the University of Michigan. Its Italian counterpart would be

the following: students attending the last year of the senior high school who do not have adequate financial means could be offered remedial courses, if necessary, and other types of assistance such as free maintenance. Their status would be the same as that of other students and when they enter the university, these students could apply for scholarships under the same conditions as all other students.

Crisis of the Campus.

The residential American campus, which many of us wish to establish in Italy, has been severely criticized by today's educators. It is noted that the campus creates some sort of fictitious town where students lead an unrealistic life, far from the problems which they have to face later on. Moreover, such a large community of young people is not in a position to defend itself from propaganda, even political, and often dangerous, e.g., the wide-spread drug addiction among young people. University campuses in America have contributed to the weakening of family ties. It is a common practice for both girls and boys to leave their families when they enter college at 16 or 17 years of age. Today, the typical American campuses are confronted with serious social problems.

In Italy, the family still has something to teach students who enter university life; therefore, it is very interesting for us to know the solutions which are being sought in America in order to prevent the deficiencies of the campus. These solutions are sought through new methods of teaching, which would be more effective and would give the students the possibility of living with their families; the university should move towards young people, not vice-versa. Therefore, there is a need of more advanced methods, i.e., teaching courses on TV, such as those already experienced in the U.S., (and also in Russia following the American experience). I refer also to the possibility of having

courses of study on TV for students who reside within a 100 km distance from the university. Such courses should be more rewarding than the traditional ones, and could be improved by technical devices, facilitating discussion between students and teachers.

Conclusion.

The vitality of American universities depends not only on their large financial means but also on the great independence in the choice of their curriculum, which is not only flexible but can always be improved. Since the time has not yet come, in political terms, for the abolition of the legal value of a university degree, it is of the utmost importance to give the universities the greatest independence and include them under the regional administrative system.

Many positive initiatives taken by American universities (i.e. continuing courses of instruction for adults, evening courses, etc.) can be introduced in Italy, according to the region, in varying degrees. It is, therefore, necessary to have in a university a large number of students from the region where the university functions. It is also a must that Italian university reform take into consideration the extent and how the new university structures affect the regional administrative system.

The wealth of American universities leads us to consider the role of our Ministry of Public Instruction (paralyzed by many problems at every school level) even more anachronistic, not to mention the role of our Ministry for Scientific Research (still without portfolio), which has an even more absurd position, and such a big organization as the National Research Council, which, instead of devoting itself to scientific research on a national level, substitutes for the Ministry of Public Instruction by giving some "oxygen" to individual research in our university institutes.

Transferring the universities and the National Research Council to a unique "Ministry for Scientific Research and University Institutions" should be considered the first step which can no longer be postponed, and as the platform from which

a more efficient regional decentralization can be originated.

Let us consider, for example, the problems connected with personnel (even at lower levels) and the positions held on a national basis, which create a heavy load of **bureaucratic** practices.

Much work has been done in these years waiting for the approval of the university reform. Meanwhile, it is essential that our universities survive, with the state adopting its contribution to the growing number of students in every field, and not only in the field of financial assistance.

APPENDIX

ITALIAN AMERICAN UNIVERSITIES
EXCHANGE PROJECT, PHASE I

1. Program and American Participants, Phase I

SEMINAR I

Dialogues 1-10 on the Rutgers University Campus
March 16-27, 1970

Opening Session - Reception and Dinner
President Nason W. Gross, Speaker

Dialogue 1 - "University Autonomy"
Ardath W. Burks, Moderator*
Archibald S. Alexander
James R. Watson
Edward B. Wilkens

Dialogue 2 - "University Finance"
Edward B. Wilkens, Moderator
Lowell C. Doak
John L. Swink

Dialogue 3 - "Decision-Making in the University"
Ardath W. Burks, Moderator
Herbert R. Kells
Henry R. Winkler

Dialogue 4 - "Educating the Gifted"
Henry C. Herge, Moderator**
Jane Raph
Hilton Schwebel

Dialogue 5 - "Faculty-Student Relations"
Bradford S. Abernethy, Moderator
Susan R. Bernstein
Earle W. Clifford
Howard J. Crosby
Elliot Greenspan
Richard Levao

*Ardath W. Burks, as Project Director of the Italian-American Universities Exchange Program, attended and participated in Seminars I, II and IV. He also served as host during Italian Rectors' visitation to Rutgers.

**Henry C. Herge, as Project Rapporteur, attended all Dialogues in Seminars I, III and IV. He was also a member of the American Team to Italy, Phase II.

- 2 -

Dialogue 6 - "The University and Research"

Henry C. Herge, Moderator
 Charles F. Main
 Henry C. Torrey

Dialogue 7 - "The Humanities Program"

Remigio U. Pane, Moderator
 Anna S. Benjamin
 Henry W. Kaufman
 Joseph E. Laggini

Dialogue 8 - "The Science Program"

James H. Leathem, Moderator
 Arnold B. Grobman

Dialogue 9 - "University Extension, Off-Campus Centers"

Herbert A. Levine, Moderator
 Ernest E. McMahon
 Hamilton Stillwell
 Kenneth W. Wheeler

Dialogue 10 - "Faculty and Departmental Organization"

Guido G. Weigend, Moderator
 G. Reginald Bishop
 Remigio U. Pane

SEMINAR II

Dialogues 1-10 on the University of Michigan Campus
 March 30 - April 4, 1970 *

Dialogue 1 - "Decision-Making in the University"

Robben W. Fleming
 Allan F. Smith
 Arthur G. Norman
 Michael Radock
 Herbert W. Hildebrandt
 Stephen H. Spurr
 Wilbur K. Pierpont
 Barbara W. Newell

*Dr. Raymond Grew, Professor of History and Director, Center for Western European Studies, together with J. Downs Herald, Associate Supervisor of Conferences, Extension Service; and Joyce M. Schrock, Conference Coordinator, Extension Service, served as co-hosts during the Italian University Rectors' visitation to the University of Michigan. Dr. Grew was also a member of the Project Planning Committee and a member of the American Team to Italy. (June-July, 1970)

- 3 -

Dialogue 2 - "The University as a Center for Research"

Geoffrey Norman
James T. Wilson
Robert C. F. Bartels
Donald J. Portman
Robert E. Burroughs
Hansford W. Farris
Robert C. Angell, Sinner Speaker

Dialogue 3 - "Techniques of Teaching"

Donald R. Brown
Hazen Schwaacher
Wilbert J. McKeachie
Richard Mann
Frank Koen
William Uttal
Louis Orlin

Dialogue 4 - "Medical Education"

John Gronvall
George R. DeMuth
Henry Coppolillo

Dialogue 5 - "Organization of the University"

Allan F. Smith
Francis Allen
William Hays
Sidney Fine
Charles G. Overberger
Joseph Payne

Dialogue 6 - "Organization of Student Life"

James Robertson
Theodore Newcomb
Carl Cohen
Edward Salowitz

Dialogue 7 - "Libraries of the University"

Frederick Wagnan
Roland Stewart
Connie Dunlap
Howard Peckham
Joseph H. Freyz
Rose-Grace Faucher
Gerhard Weinberg

- 4 -

Dialogue 8 - "Finance and Planning"
Arthur M. Ross

Dialogue 9 - "Admissions and Curriculum"
Joseph Easley
Carl Goldberg
Martha Jones
Shaw Livermore
Clyde Vroman

Dialogue 10 - "The University and the Community"
Stanley Graham
Richard Kennedy
Michael Radock
Everett Soop
Milton Stern

SEMINAR III

Dialogues 1-9 on the Columbia University Campus
April 6-10, 1970

Dialogue 1 - "The Private University: An Overview"
Ivar E. Berg, Jr., Moderator *
Jacques Barzun
W. Bruce Bassett
Courtney C. Brown

Dialogue 2 - "The Structure and Functioning of a Private University"
Ivar E. Berg, Jr., Moderator
W. Theodore deBary
Andrew Delan
Ralph Halford

Dialogue 3 - "The Inter-University Library System in the U.S."
Ivar E. Berg, Jr., Moderator
Warren J. Haas

*Dr. Ivar Berg, Jr., Associate Dean of Faculties and Professor of Business Administration, served as host during the Italian University Rectors' visitation at Columbia University.

- 5 -

Dialogue 4 - "The University's External Relations: A Discussion of Columbia's Relations at its 'Boundaries'"

Ivar E. Berg, Jr., Moderator

Raymond Anderson

Harold E. Emerson

Richard Gilmore

Martin J. Gleason

Eric Holtzman

Dialogue 5 - "Professional Education at Columbia"

Ivar E. Berg, Jr., Moderator

Richard Baker

Wesley Hennessy

Richard C. Robey

Hope S. Simpson

William C. Warren

Dialogue 6 - "Undergraduate Student Exchange Programs"

Ivar Berg, Jr., Moderator

John Faggi

Joel Slocum

Dialogue 7 - "Departmental Structure and Institutes"

Ivar Berg, Jr., Speaker

Dialogue 8 - "The Place of the Humanities and General Education at Columbia"

Ivar Berg, Jr., Moderator

George K. Fraenkel

Carl F. Hovde

Polykarp Kusch

Aaron W. Warner

Dialogue 9 - "The Role of Teachers College in the Preparation of Teachers"

John H. Fischer, President of Teachers College and seven representative members of the Faculty of Teachers College. President and Mrs. Fischer were hosts at the reception and luncheon-discussion.

SEMINAR IV

Dialogues held in Washington, D.C. American Council on Education and the National Academy of Sciences, April 13-14, 1970

Dialogue 1 - "Comparison of Standing Conference of Rectors of Italian Universities with Similar Organizations in U.S. Higher Education."

John L. Landgraf, Moderator*

Christian K. Arnold

Charles P. McCurdy

Logan Wilson

- 6 -

- Dialogue 2 - "Interchange of Students and Faculty between Italian
and American Universities"
Gustavo O. Arlt, Moderator
Donald Blackmer
- Dialogue 3 - "A Comparison of U.S. Office of Education with Italian
Ministry of Education"
Fred C. Cole, Moderator
J. Wayne Reitz
- Dialogue 4 - "Cooperative Programs of U.S. Office of Education with
Council of Graduate Schools to Train College Teachers"
Fred C. Cole, Moderator
Gustavo C. Arlt
J. Wayne Reitz
- Dialogue 5 - "An Experimental Program to Train University Administrators"
Charles G. Dobbins, Speaker
- Dialogue 6 - "Evaluation and Appraisal of the Program"
Ardath W. Burks, Moderator

2. ROSTER OF AMERICAN PARTICIPANTS

Exchange Project, Phase I.

<u>Locus</u>	<u>Seminar</u>	<u>Dialogue</u>
Rutgers University	I	1-10
University of Michigan	II	1-10
Columbia University	III	1-9
Washington, D.C.	IV	1-6

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ABERNETHY, Bradford S. (I.5)

Chaplain and Hill Professor of Bible and Ethics, Rutgers College and
Program Associate, International Center, Rutgers University.

ALLEN, Francis (II.5)

Dean, Law School, The University of Michigan.

ALEXANDER, Archibald, S. (I. 1)

Vice-Chairman of the Board of Governors, Rutgers University.

ANDERSON, Raymond (III. 4)

Assistant Dean of the Graduate School of Arts and Sciences,
Columbia University.

ANGELL, Robert C. (II. 2)

Professor Emeritus of Sociology, The University of Michigan.
Dinner speaker.

ARIT, Gustavo O. (IV. 2 & 4)

President, Council of Graduate Schools, former Dean of the Graduate
Division, University of California at Los Angeles.

ARNOLD, Christian K. (IV. 1)

Associate Director, National Association of State Universities and
Land Grant Colleges.

BAKER, Richard (III. 5)

Dean, School of Journalism, Columbia University.

BARTLEIS, Robert C.F. (II. 2)

Director, Computing Center, The University of Michigan.

BARZUN, Jacques (III.1)

University Professor and formerly Dean of Faculties and Provost of the University, Columbia University.

BASSETT, W. Bruce (III.1)

Assistant Provost for Budget and Assistant Professor of Business, Columbia University.

BEAUDRY, Robert M. (IV. 1-6)

Country Director for Austria, Italy and Switzerland, Bureau of European Affairs, U.S. Department of State.

BENJAMIN, Anna S. (I. 7)

Professor of Classics, Douglass College, Rutgers University.

BERG, Jr., Ivar

Associate Dean of Faculties and Professor of Business Administration, Columbia University. Host during Rectors' visit to Columbia University Seminar III, Dialogues 1-7, Moderator and Speaker at Dialogue 7.

BERNSTEIN, Susan R. (I. 5)

President, Student Government Association, Douglass College, Rutgers University.

BISHOP, G. Reginald (I. 10)

Dean of Instruction, Rutgers College, Rutgers University.

BLACKMER, Donald (IV. 2)

Professor of Political Science, Massachusetts Institute of Technology; and member of the American Team to Italy, Phase II.

BROWN, Courtney C. (III. 1)

Professor of Business and formerly Dean of the Graduate School of Business, Columbia University.

BROWN, Donald R. (II. 3)

Research Psychologist and Professor of Psychology, The University of Michigan.

BURKS, Ardath W. (I, II, IV)

Director of the International Center and Professor of Political Science, Rutgers University; Project Director of U.S. Program for Italian University Rectors and host during Rectors' visitation at Rutgers.

BURROUGHS, Robert F. (II. 2)

Director of Research Administration, The University of Michigan.

CARPENTER, Anne (IV. 1-6)

Program Officer, Committee on International Exchange of Persons.

CLIFFORD, Jr., Earle W. (I. 5)

Vice-President for Student Affairs, Rutgers University.

COHEN, Carl (II. 6)

Director, Residential College and Professor of Philosophy, The University of Michigan.

COLE, Fred C. (IV. 3)

President, Council on Library Resources, Inc; former President of Washington and Lee University; member of the Committee on International Exchange of Persons.

COLEMAN, John S. (IV. 6)

Executive Officer, National Academy of Sciences.

COPPOLILLO, Henry (II. 4)

Associate Professor of Psychiatry, The University of Michigan.

CORIDEN, Guy E. (IV. 6)

Director of Office of European Programs, Bureau of Educational and Cultural Affairs, U.S. Department of State.

CROSBY, Howard J. (I. 5)

Dean of Students, Rutgers College, Rutgers University.

de BARY, W. Theodore (II. 2)

Carpentier Professor of Oriental Studies and Chairman of the Executive Committee of the Senate, Columbia University.

De MUTH, George R. (II. 4)

Associate Dean for Academic Affairs, Medical School, The University of Michigan.

DOAK, Lowell C. (I. 2)

Associate Treasurer and Controller, Rutgers University.

DORRINS, Charles G. (IV. 5)

Executive Secretary of the American Council of Education; Director of the Academic Administration Internship Program.

DOJAN, Andrew (II. 2)

Law student and Secretary of the Senate, Columbia University

DUNLOP, Connie (II. 7)

Head, General Library, The University of Michigan.

EISLEY, Joseph (II. 9)

Associate Dean, College of Engineering, The University of Michigan.

EMERSON, Harold F. (III. 4)

Vice-President for Development and Alumni Relations, Columbia University.

FAGGI, John (III. 6)

Director, Foreign Student Center, Columbia University.

FARRIS, Hansford W. (II. 2)

Associate Dean, College of Engineering and Professor of Electrical Engineering, The University of Michigan.

FAUCHER, Rose-Grace (II. 7)

Undergraduate Library, The University of Michigan.

- FINE, Sidney (II. 5)
Chairman, Department of History, The University of Michigan.
- FISCHER, John H.
President of Teachers' College, Columbia University. Seminar III,
Dialogue 2, Host and Moderator.
- FLEMING, Robben W. (II. 1)
President, The University of Michigan.
- FRAENKEL, George K. (III. 6)
Dean of the Graduate School of Arts and Sciences, Professor of
Chemistry, Columbia University.
- GABBARD, Hazel, (IV. 1-6)
Head, International Organizations Branch, U.S. Office of Education.
- GILMORE, Richard (III. 4)
Vice Registrar, Columbia University.
- GLEASON, Martin J. (III. 4)
Assistant Vice-President for Public Affairs, Columbia University.
- GOLDBERG, Carl (II. 9)
Resident Director, Pilot Program, and Teaching Fellow in History,
The University of Michigan.
- GOLDBERG, Miriam (III. 9)
Professor, Department of Curriculum and Teaching, Teachers College,
Columbia University.
- GRAHAM, Stanley (II. 10)
Director of Information Services, University Relations, The University
of Michigan.
- GREENSPAN, Elliot (I. 5)
Student Rutgers College and Targum Editor, Rutgers University.
- GREV, Raymond
Director, Center for Western European Studies and Professor of History,
The University of Michigan. Member of the Project Planning Committee,
host during Rectors' Seminar II, and member of the American Team to
Italy, Phase II.
- GROEMAN, Arnold B. (I. 8)
Dean of Rutgers College, Rutgers University. Seminar I, Dialogue VIII.
- GRONVALL, John (II. 4)
Associate Dean, Medical School, The University of Michigan.
- GROSS, Mason W. (I. 1)
President, Rutgers University. Opening session, Dinner speaker.

- HAAS, Warren C. (III. 3)
Director of Libraries, Columbia University.
- HALFORD, Ralph. (III. 2)
Vice-President for Special Projects, Columbia University.
- HASKINS, Esther (IV. 1-6)
Academic Programs Advisor, Board of Foreign Scholarships, U.S. Department of State.
- HAYS, William (II. 5)
Dean, College of Literature, Science, and the Arts, The University of Michigan.
- HENNESSY, Wesley (III. 5)
Dean, School of Engineering and Applied Science, Columbia University.
- HERGE, Henry C. (I, III, IV)
Program Associate, International Center and Professor of Comparative Education, Rutgers University; Project Rapporteur and member of American Team to Italy, Phase II.
- HEROLD, J. Downs
Associate Supervisor of Conferences, Extension Service, The University of Michigan. Served as a host during Seminar II.
- HILLEBRANDT, Herbert W. (II. 2)
Secretary of the University and Assistant to the President, The University of Michigan.
- HOLTZMAN, Eric (III. 11)
Assistant Professor of Biological Sciences, Columbia University.
- HOWE, Carl F. (III. 8)
Dean of Columbia College, Professor of English and Comparative Literature, Columbia University.
- HUMPHREY, Richard A. (IV. 1-6)
Director, Commission on International Education, American Council of Education; member of the Committee on International Exchange of Persons.
- IRVING, Frederick (IV)
Deputy Assistant Secretary for the Bureau of Education and Cultural Affairs, U.S. Department of State, served as host during the Italian University Rectors' reception at the U.S. Department of State.
- JOHNSON, Charles K. (IV)
Officer-in-Charge, Italian Programs, Bureau of European Affairs, U.S. Department of State.
- JOHNS, Martha (II. 9)
Opportunity Awards, The University of Michigan.

- KAUFMAN, Henry W. (T. 7)
Professor of Music, Rutgers College, Rutgers University.
- KELIS, Herbert R. (I. 3)
Associate Provost, Rutgers University. Seminar I, Dialogue III.
- KENNEDY, Richard (II. 10)
Director, State and Community Relations, The University of Michigan.
Seminar II, Dialogue 16.
- KNOX, Alan (III. 9)
Professor, Department of Higher and Adult Education, Teachers College,
Columbia University.
- KOEN, Frank (II. 3)
Associate Professor of Psychology, The University of Michigan.
- KOSCH, Polykarp (III. 8)
Vice-President and Dean of Faculties, Professor of Physics,
Columbia University.
- IAGGINI, Joseph E. (I. 7)
Associate Dean, Rutgers College and Professor of Romance Languages,
Rutgers University.
- LAK, Elizabeth P. (I, III, IV. 1-6)
Executive Associate, Committee on International Exchange of Persons;
member of the Project Planning Committee.
- LANDGRAF, John L. (IV)
Executive Secretary, Committee on International Exchange of Persons;
served as host and moderator during the Italian University Rectors'
visit to Washington, D.C.
- LATIMER, John F. (IV. 1-6)
Chairman, Department of Classical Languages, George Washington University;
member of the Committee on International Exchange of Persons.
- LEARY, Eleanor (IV. 1-6)
Program Officer, Committee on International Exchange of Persons.
- LEATHEN, James H. (I. 8)
Director, Bureau of Biological Research and Professor of Zoology,
Rutgers University.
- LEVAO, Richard (I. 5)
President, Student Council of Rutgers College, Rutgers University.
- LEVINE, Herbert A. (I. 9)
Director of the Labor Education Center and Professor Labor Studies
and Education, Rutgers University.
- LIVERMORE, Shaw (II. 9)
Professor of History, The University of Michigan.

- DOVELY, Alice F. (IV. 1-6)
Executive Assistant, Committee on International Exchange of Persons.
- MAIN, Charles F. (I. 6)
Associate Director, Research Council and Professor of English,
Rutgers University.
- MANN, Richard (II. 3)
Professor of Psychology, The University of Michigan.
- MARRARO, Howard R. (III. 1-9)
Professor Emeritus of Italian Language and Literature, Columbia University
- McCURDY, Charles (IV. 1)
Executive Secretary, Association of American Universities.
- McKEACHIE, Wilbert J. (II. 3)
Chairman, Department of Psychology, The University of Michigan.
- McKIMON, Ernest R. (I. 9)
Dean and Professor Emeritus, University Extension Division, and former Director,
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- NEWMOMB, Theodore (II. 6)
Associate Director, Residential College and Professor of Sociology and
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- NEWELL, Barbara W. (II. 1)
Acting Vice-President for Student Affairs, The University of Michigan.
- NORMAN, Arthur (II. 1)
Vice-President for Research, The University of Michigan.
- NORMAN, Geoffrey (II. 2)
Vice-President for Research and Professor of Botany. The University
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- ORLIN, Louis (II. 3)
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- OVERBERGER, Charles G. (II. 5)
Chairman, Department of Chemistry, The University of Michigan.
- PANE, Remigio U. (I, 7 and 10, IV)
Professor of Romance Languages, Rutgers University; member of Planning
Committee and member of American Team to Italy, Phase II.
- PASSOW, A. Harry (III, 9)
Chairman and Professor, Department of Curriculum and Teaching,
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- PAYNE, Joseph (II. 5)
Professor of Education, The University of Michigan.

- PECKHAM, Howard (II. 7)
Director, Clements Library, The University of Michigan.
- PIERPONT, Wilbur K. (II. 1)
Vice-President for State Relations and Planning, The University of Michigan.
- PORITMAN, Donald J. (II. 2)
Chairman, Senate Advisory Committee of Research Policies and Professor of Meteorology and Oceanography, The University of Michigan.
- PRESTON, Helen (IV. 1-6)
Program Officer. Bureau of European Affairs, U.S. Department of State.
- RALOCK, Michael (I. 10)
Vice-President for University Relations, The University of Michigan.
- RAPH, Jane (I. 4)
Professor Psychological Foundations, Graduate School of Education, Rutgers University.
- REGAN, Paul C. (IV. 1)
Director, International Services and Research Staff, Institute of International Studies, U.S. Office of Education.
- REILLY, J. Wayne (IV. 3)
Director, Division of University Programs, Bureau of Higher Education, U.S. Office of Education; former President of the University of Florida.
- ROBERTSON, James (II. 6)
Director, Residential College and Associate Dean, College of Literature, Science and the Arts, The University of Michigan.
- ROBEY, Richard C. (III. 5)
Associate Dean, Graduate School of Arts and Sciences, Columbia University.
- ROSENTHAL, Albert (III. 4)
Professor, School of Law, Columbia University.
- ROSS, Arthur M. (II. 8)
Vice-President for State Relations and Planning, The University of Michigan.
- SALOWITZ, Edward (II. 6)
Associate Director, University Housing, The University of Michigan.
- SCOFIELD, Herman T. (IV. 1-6)
Deputy Director, Office of European Affairs, U.S. Department of State.
- SCHROCK, Joyce M.
Conference Coordinator, Extension Service, The University of Michigan.
Served as a host during Seminar II.
- SCHUMACKER, Hazen (II. 3)
Associate Director of Television, Center for Research on Learning and Teaching, The University of Michigan.

- SCHEFFEL, Milton (I. 4)
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Rutgers University.
- SHOMAKER, Francis (III. 9)
Director, and Professor, Office of International Programs and Services,
Teachers College, Columbia University.
- SIMPSON, Hoke S. (III. 5)
Associate Dean Graduate School of Business, Columbia University.
- SLOCUM, Joel (III. 6)
Foreign Students Admission Counselor, Columbia University.
- SMITH, Allan F. (II. 1 and 5)
Vice-President for Academic Affairs, The University of Michigan.
- SOOP, Everett, (II. 10)
Director, University Extension Service, The University of Michigan.
- SPURR, Stephen H. (II. 1)
Dean, Graduate School, The University of Michigan.
- STEIN, Milton (II. 10)
Director, University Center for Adult Education, The University of
Michigan.
- STEVENS, Maria (I, III, IV. 1-6)
Program Officer, Office of European Programs, Bureau of Educational
and Cultural Affairs, U.S. Department of State.
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- STILLWELL, Hamilton (I. 9)
Dean and Professor, University Extension Division, Rutgers University
- SUPER, Donald (III, 9)
Director and Professor, Division of Psychology and Education, Teachers
College, Columbia University.
- SWINK, John L. (I. 2)
Vice-President and Treasurer, Rutgers University.
- THIEME, Frederick Patton
President, University of Colorado. Leader of the American Team to
Italy, Phase II.
- TORREY, Henry C. (I. 4)
Graduate School Dean, Director of Research Council and Professor of
Physics, Rutgers University.
- TREYZ, Joseph E. (II. 7)
Assistant Director, University Libraries, The University of Michigan.

- VOGEL, Ralph (IV. 1-6)
Staff Director, Board of Foreign Scholarships, U.S. Department of State.
- VROMAN, Clyde (II. 9)
Director of Admissions, The University of Michigan.
- VOGOLI, Bruce (III. 9)
Professor, Department of Mathematical Education, Teachers College,
Columbia University.
- WAGMAN, Frederick, (II. 7)
Director, University Libraries, The University of Michigan.
- WARNER, Aaron W. (III. 8)
Dean of the School of General Studies, Professor of Economics,
Columbia University.
- WARREN, William (III. 5)
Dean, School of Law, Columbia University.
- WATSON, James R. (I. 1)
Vice-President for Federal Legislation, Rutgers University. Member of
Phase I Planning Committee
- WAYLAND, Sloan (III. 9)
Associate Dean for Student Affairs, Teachers College, Columbia University.
- WEIGEND, Guide G. (I. 10)
Professor of Geography, Rutgers University.
- WEINBERG, Gerhard (II. 7)
Professor of History, The University of Michigan.
- WHEELER, Kenneth W. (I. 1)
Dean and Professor of History, University College, Rutgers University.
- WILKENS, Edward D. (I. 2, IV)
Director of Campus Planning and Professor of Regional Planning, Rutgers
University; member of Planning Committee and member of American Team to
Italy, Phase II.
- WINKLER, Henry R. (I. 3)
Vice-President for Academic Affairs, Rutgers University.
- WILSON, James T. (II. 2)
Director, Institute of Science and Technology and Professor of Geology and
Minerology, The University of Michigan.
- WILSON, Logan (IV. 1)
President, The American Council of Education; former Chancellor of the
University of Texas.

INTERPRETERS

SAXON, Anna-Porti (I, II, III, IV)

Project Interpreter, Phases I and II, U.S. Department of State.

TOMELLERI, Joseph (I, II, III, IV)

Project Interpreter, Phase I, U.S. Department of State

3. Roster of Italian Participants

(In the United States, March 15-April 15, 1970)

ANZILOTTI, Rolando, Professor of Anglo-American Literature, School of Letters, University of Pisa. His special interests were the selection of students with reference to the gifted and organization of student residence halls.

CARNACINI, Tito, Rector, University of Bologna; Professor of Civil Procedure, School of Law; Vice President of the Standing Conference of Rectors of Italian Universities; member of the Superior Council of Public Instruction. His special interests included the organization and structure of courses in the humanities.

ERMINI, Giuseppe, Rector, University of Perugia; Professor of History of Italian Law. He is a former member of the Chamber of Deputies and President of the Standing Commission for Education and the Arts; former Minister of Public Instruction. The governance of universities and research functions of the University were his major interests.

FAEDO, Alessandro, Rector, University of Pisa; Professor of Mathematical Analysis; Director, National University Center of Electronic Computing; President, Standing Conference of Rectors of Italian Universities. His primary interests included governance of universities, research functions of the university.

FLORIDI, Gaetano, Inspector General, General Directorate for Higher Education, Ministry of Public Instruction. His main interests were university, programming and recruitment and training of university administrative officers.

MADIA-CORRADI, Dr. Sofia (Mrs.), Secretary of the Standing Conference of Rectors of Italian Universities; Assistant to the Chair of Education, School of Magistero, University of Rome. Her interests were varied including mental measurements, testing, instructional innovations, and programs for culturally deprived students.

PRINI, Pietro, Professor of the History of Philosophy, University of Rome; President of the National Center for Primary Instruction; member of Board of Directors of Italian Television; representative for Italy on Committee for Cultural Cooperation of Council of Europe. Interested in all aspects of E T-V.

ROLLA, Mario, Rector, University of Pavia, Professor of Physical Chemistry; Secretary-General, Standing Conference of Rectors of Italian Universities; Permanent Delegate of the Italian Government to Committee for Higher Education and Research of the Council of Europe. Financing higher education and structure of decision-making bodies were his special interests.

VACCAIO, Giuseppe, Vice-Rector, University of L'Aquila, Dean, School of Engineering, University of Rome and Professor of Geometry. His interests were in University management and organization.

VIGNOCCHI, Gustavo, Rector, University of Modena, Professor of Administrative Law. He was interested in U.S. law school curricula.

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BLACKMER, Donald, Associate Professor of Political Science, Massachusetts Institute of Technology and member of the Council on European Studies.

GREW, Raymond, Professor of History and Director of the Center for Western European Studies, the University of Michigan, and Member of the Council on European Studies.

HERGE, Henry C., Professor of Comparative Education and Program Associate, International Center, Rutgers University; Project Rapporteur, Phases I and II.

PANE, Remigio, U., Professor of Romance Languages and Chairman of the Department of Romance Languages, Rutgers University.

THIEME, Frederick Patton, President, University of Colorado, and member of the Board of the National Science Foundation.

WILKENS, Edward B., Professor of Planning and Director of Campus Planning, Rutgers University.